Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	WC Docket No. 17-108
Restoring Internet Freedom	)	

COMMENTS OF

THE FREE STATE FOUNDATION

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I. INTRODUCTION AND SUMMARY

These comments are filed in response to the Commission's Notice of Proposed Rulemaking (or "Notice") proposing to restore Internet freedom by reclassifying broadband Internet access service as an information service and repealing the public utility regulatory regime imposed by the *Title II Order* in 2015.

The *Title II Order* was a fatefully misguided act of regulatory aggression leveled at a dynamic broadband Internet marketplace, and it must be reversed. The Commission's decision to impose public utility regulation on broadband Internet access services was unwise, unnecessary, and unjustified from a policy perspective, and it was legally unsound. Growing evidence points to declines in investment in broadband infrastructure as a result of direct and indirect regulatory costs and uncertainty created by *Title II Order*. Foregone investment is detrimental to innovation and inhibits next-generation broadband network upgrades that are needed for the benefit of consumers as well as for the entire U.S. economy.

[1] These comments express the views of Randolph J. May, President of the Free State Foundation, Seth L. Cooper and Theodore R. Bolema, Senior Fellows, and Michael J. Horney, Research Associate. The views expressed do not necessarily represent the views of others associated with the Free State Foundation. The Free State Foundation is a nonpartisan, non-profit free market-oriented think tank.

Now, without delay, the Commission should act to remedy the demonstrable harm that the agency's misguided foray into overzealous Internet regulation has caused. The Commission should rescind its Title II public utility classification of broadband Internet access services and, by classifying Internet access services as information services, return the agency's broadband policy back to a light touch, pro-market footing. This would be a return to the bipartisan policy consensus that largely prevailed from the time of the Clinton Administration up to the Obama Administration. Reversing the Title II classification would comport with the text and structure of the Communications Act. And such reversal would restore Internet freedom and redirect the Commission's policy efforts toward encouraging new investment and more rapid deployment of broadband services to all Americans.

Determination of the regulatory classification of broadband Internet access service is, first and foremost, a straightforward matter of statutory construction. The Telecommunications Act of 1996 contains the mutually exclusive distinctions between unregulated, or, at most, lightly regulated information services and common carrier telecommunications services. Broadband Internet access service is an "information service" because broadband Internet Service Providers (ISPs) offer consumers the capability, consistent with the statutory definition, for "generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information." Offering Internet access is what makes the service capable of performing those information-related functions for end users. Significantly, a broadband ISP need only offer the "capability" for performing or engaging in any one of those functions to fit within the definition of an information service. Broadband ISPs offer the capability for each function in the sense of

providing end users with the potential or opportunity for use, even if such functions are not actually used in every instance.

Importantly, in *NCTA v. Brand X Services* (2005), the U.S. Supreme Court affirmed the underlying logic of the Notice's proposal to reclassify broadband service as a Title I information service – and *not* a Title II telecommunication service – based on that straightforward statutory interpretation. The *Brand X* decision affirmed the 2002 *Cable Modem Order*'s conclusion that, from an end user perspective, broadband ISPs are offering a functionally integrated service, not pure transmission as a standalone basic service. Under *Brand X*, to the extent the statutory language is unclear – and we don't agree it is – the Notice's reasoned explanation for why broadband service fits under Title I and not Title II would be entitled to *Chevron* deference by the courts and surely be upheld.

Viewed in another context, the *Title II Order*'s reclassification of broadband services under Title II involves a major question of political and economic significance. The broadband market emerged and thrived in a light touch regulatory environment, thanks to a bipartisan consensus reaching back to the Clinton Administration. For the Commission to shatter that consensus by imposing Title II regulation on an Internet service, a clear statement by Congress conferring such authority on the agency is required. But Congress nowhere provided a clear statement of that kind, which the Supreme Court's major questions doctrine requires. To the contrary, in 1996 Congress stated that it is the policy of the United States "to encourage the vibrant and competitive free market that presently exists for the Internet and other interactive computers, unfettered by Federal and State regulation." Thus, reversal of the Commission's public utility regulation of Internet services is necessary because agency lacked legal authority for its Title II reclassification decision.

Repeal of the Commission's heavy-handed public utility regulatory approach is also necessary because today's broadband Internet access services market is clearly dynamic, and therefore ideally suited for the light-touch regulatory approach under Title I. The broadband market's competitiveness is reflected in the choices that consumers enjoy across a range of competing platforms. According to the FCC's *Internet Access Services Report: Status as of June 30, 2016*, 79% of the census blocks with housing units were served by three or more broadband ISPs offering speeds of 10 Mbps or higher, with and additional 18% served by two or more providers offering speeds of 10 Mbps or higher.

Consumers also have access to competing mobile broadband ISPs. According to the FCC's *Nineteenth Wireless Competition Report* released in 2016, even as of December 2015, 95.9% of the U.S. population has access to three or more 4G LTE mobile service providers and 89.1% has access to four or more providers. According to the *Nineteenth Report*, the Commission's own speed test found an average 4G download speed of 16.68 Mbps during the second half of 2015. And the Commission reported that, as of December 2015, satellite providers were offering broadband services to 99.1% of developed census blocks at download speeds of at least 10 Mbps. Since December 2015, it is widely acknowledged that the speeds offered by wireline, wireless, and satellite providers have increased, in some instances dramatically and ubiquitously. For example, HughesNet now offers satellite broadband service across the country at a download speed of 25Mbs.

Repeal of public utility regulation is also warranted by some of the logical fallacies and profoundly mistaken factual premises asserted to justify the *Title II Order*. Notably, the *Title II Order*'s failure to make a finding that broadband ISPs possess market power amounts to an utter failure to support its supposed "virtuous cycle"/"gatekeeper" justification for imposing public

utility regulation on ISPs. Broadband ISPs have no economic incentive or ability to economically benefit from blocking, throttling, or otherwise unreasonably discriminate against content because consumers may choose among competing mobile and fixed providers.

In lieu of any finding of market power by the ISPs, the *Title II Order* relied on a false narrative that consumer "switching costs" are too high, supposedly creating market power even when multiple broadband ISPs concededly offer service in a given area. Yet the *Nineteenth Report* cites examples of switching incentives from all four national mobile carriers, including plan buyouts, phone discounts, service discounts, and free trials. It also cited plans by Verizon Wireless, Sprint, and AT&T to join T-Mobile in discontinuing term contracts and equipment subsidies.

Evidence is emerging that the *Title II Order* is depressing broadband capital investment. An analysis by Free State Foundation Research Associate Michael Horney projected a decrease of $5.6 billion in broadband capital investment over 2015 and 2016. Other analysts have generated similar estimates of foregone investment running into the billions. And with respect to mobile broadband investment, CTIA's annual survey finds that wireless providers' investment declined from $32.1 billion in 2014 to $26.4 billion in 2016, a drop of $5.7 billion or 17.8%. Restoring a light touch regulatory environment will revitalize capital investment in next-generation broadband infrastructure deployments, thereby expanding and enhancing service options for consumers.

Aside from the legal error relating to the Commission's erroneous classification of ISPs, the *Title II Order* rests upon another faulty basis of authority. Section 706 does not provide a standalone source of authority for the Commission to regulate broadband Internet access services. D.C. Circuit court decisions do hold that the Commission's recent pro-regulatory re-

interpretation of Section 706 was not so arbitrary or capricious as to require overruling under a highly deferential judicial standard. But those decisions do not preclude the Commission from adopting a better-reasoned interpretation of Section 706, one consistent with earlier agency precedents that also were upheld by the D.C. Circuit applying a deferential standard.

If the Commission rescinds its Title II public utility regulation of broadband Internet access services and declines to impose new regulations, there are other legal protections in place for consumers and market competition. The U.S. Department of Justice and Federal Trade Commission (FTC) have authority to investigate and pursue legal action in instances where broadband ISPs engage in anticompetitive practices that are claimed to constitute potential antitrust violations. Additionally, a near-consensus industry view that end users should not be subject to blocking, substantial degrading, or throttling by their broadband ISPs is widely reflected in service terms that broadband ISPs furnish to their end users. With the FTC's jurisdiction restored by prospective Title I reclassification, alleged breaches no-blocking, no-substantial degrading, and no-throttling terms of service by broadband ISPs could be investigated by the FTC as deceptive trade practices and made subject to enforcement actions. And reclassifying broadband service as a Title I information service, thereby restoring FTC authority over broadband ISP privacy practices, will alleviate any claimed problematic aspects of FCC privacy regulation. Privacy regulation will be restored to the FTC, where it should be, and where a uniform enforcement regime, applicable alike to ISPs and Internet giants like Google and Amazon, can be implemented.

In the event the Commission were to conclude that some sort of FCC regulatory oversight of ISPs is either required by law or necessary, at most, it should adopt a narrowly circumscribed light-touch oversight regime. Such oversight might be grounded in a commercial reasonableness

standard that requires findings of market failure and consumer harm before the imposition of any prohibitions or sanctions. The Commission possibly may have a basis for adopting such a circumscribed oversight regime under Title I ancillary authority in connection with its responsibilities under certain statutory provisions. The circumscribed oversight regime should be enforceable through case-by-case adjudications that require the filing of a complaint to initiate the adjudicatory process. The adjudication process should incorporate a rebuttable presumption to the effect that, absent a showing by clear and convincing evidence of market power and consumer harm, an alleged practice is commercially reasonable. By requiring that adjudications be based on an analysis of evidence of market power and consumer harm, the likelihood of regulatory overreach or arbitrariness will be reduced significantly.

Consumers stand to benefit from innovative new services providing quality-of-service guarantees that depend upon "paid priority" arrangements between broadband ISPs and edge providers. Evidence from other markets shows that paid prioritization arrangements that develop without regulatory intervention generally lead to more capital investment and consumer benefits. The *Title II Order*'s absolute ban on paid prioritization arrangements should be removed. Any concerns that paid prioritization agreements may produce anticompetitive effects should be addressed by the DOJ or FTC, or otherwise be subject to case-by-case adjudication by the Commission under the narrowly circumscribed commercial reasonableness standard.

The Commission should also repeal the *Title II Order*'s open-ended "general conduct" standard – the "no-unreasonable interference/disadvantage" rule – for addressing alleged concerns with broadband ISP practices. The general conduct standard's non-exhaustive factors are vague and do not provide a sufficient degree of predictability as to what conduct is permitted or not. The Commission, tellingly, calls the conduct standard a "catch-all" provision right in its

order. Thus, the Commission empowered itself to ban or restrict broadband ISP practices based on little more than a mere predilection instead of a clear showing of harm according to ascertainable principles.

Further, the Commission should not impose new regulations on mobile broadband Internet access services even if it determines it possesses ancillary authority over those services. Regulatory mandates on mobile broadband ISP practices are particularly unwarranted in light of the mobile broadband market's acknowledged competitive conditions and dynamic changes. Technical constraints faced by mobile broadband providers in meeting high-speed, high data traffic are compounded by challenges related to 4G network upgrades and 5G network transitions as well as the integration of myriad end-user devices with unique functional capabilities and constraints.

The Commission is to be commended for its proposal to conduct an analysis that compares the costs and the benefits of maintaining its Title II reclassification of broadband Internet access service. A scholarly review by Free State Foundation Senior Fellow Theodore Bolema of the Commission's cost-benefit analysis proposal is attached to these comments as Appendix A. The review shows that the costs of maintaining the current regulations clearly outweigh the benefits.

Of course, after more than a decade of back-and-forth fighting and litigating "net neutrality" at the Commission and in the courts, it would be most appropriate for Congress to enact a law regarding the regulatory status of broadband ISPs and permissible or prohibited practices. In our view, the authority of the FCC (or the FTC or any other entity) should be narrowly-circumscribed and should require clear and convincing evidence of market failure and consumer harm before the imposition of any sanctions in a case-by-case adjudication. In light of

the rapidly evolving, dynamic nature of the Internet, and the competitive market that exists among Internet providers, it is preferable for any such "net neutrality" law to avoid absolute bans on ISPs practices, even ones on which there may be seeming consensus now, in favor of a standard requiring a convincing showing of market power and consumer harm. In other words, Congress should not adopt rules that, inevitably, will have the effect of deterring future investment and innovation by virtue of being overly rigid or prescriptive and divorced from the realities of marketplace competition.

II. BROADBAND INTERNET ACCESS SERVICES ARE TITLE I "INFORMATION SERVICES" UNDER THE TEXT AND STRUCTURE OF THE COMMUNICATIONS ACT

A. Under the Text and Structure of the Communications Act, "Broadband Internet Access Service" Meets the Definition of an "Information Service"

Determination of the regulatory classification of broadband Internet access services is first and foremost a matter of statutory construction.[2] The Telecommunications Act of 1996, in its text, distinguishes between Title I "information services" and Title II "telecommunications services," and they are mutually exclusive. The former is a lightly regulated (if at all) service classification and the latter is a heavily regulated common carrier classification. It is common knowledge and also expressly recognized by the Supreme Court, that the statutory terms for "information service" and "telecommunications service" substantially incorporated the *Computer II Order*'s "basic" and "enhanced" services definitions.[3] Whereas "basic" services involve pure

[2] Under 47 C.F.R. § 8.11(a), the Commission defines broadband Internet access service as:

> A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part.

[3] *See, e.g., National Cable & Telecommunications Assoc. v. Brand X Services*, 545 U.S. 967, 992-993 (2005).

transmission capacity and were subject to common carrier regulation, "enhanced" services were not subject to such regulation, even when transmitted via wires that themselves offered a basic service.[4]

Section 3 of the Act defines an "information service" as "the offering of a *capability* for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service."[5] Broadband Internet access service is an "information service" because broadband Internet service providers (ISPs) offer the capability for each of the non-mutually exclusive functions contained in the statutory definition.[6] Examples of such functional capabilities enabled and offered by broadband ISPs include:

- **Generating Information** – Uploading electronic documents, photos, videos, and other files to web sites, creating documents and files on web-hosted platforms, using interactive online applications.
- **Acquiring Information** – Surfing personal or commercial web sites for news, weather, traffic, and other matters, watching streaming video, listening to streaming audio, and downloading files and media content.
- **Storing Information** – Hosting in email in-boxes, posting content on web sites, and cloud storage services.
- **Transforming Information** – Collaborative content applications, network protocol conversion.
- **Processing Information** – Caching, Domain Name Service, IPv4-IPv6 conversion, firewalls, anti-virus functions, and anti-spam functions
- **Retrieving Information** – Accessing websites, downloading files and media content.
- **Utilizing Information** – Engaging in any of the information-related functions included in this list.
- **Making Available Information** – Uploading documents, photos, videos, and other files to websites, and reposting information using social media applications.

[4] *See United States Telecommunications Association v FCC*, No. 15-1063, 2017 WL 1541517 (D.C. Cir. May 1, 2017) (denial of rehearing *en banc*)(Brown, J., dissenting).
[5] 47 U.S.C. § 153(24) (emphasis added).
[6] *See* FCC, Restoring Internet Freedom, WC Docket No. 17-108, Notice of Proposed Rulemaking ("Notice") (released May 23, 2017), at ¶ 26.

The overlapping nature of the functions contained in the statutory definition of an information service implies that Title I is broad in scope. Further, the offering of only one of the functions listed above brings broadband Internet access service within the statutory definition of an information service. This is expressed by the placement of the conjunction "or" among the functions listed. In *Charter Advanced Services v. Lange*, the U.S. District Court for the District of Minnesota similarly recognized that an offering's inclusion of the capability to perform one function – transforming – sufficed to render that offering an information service.[7] As the court concluded with respect to Charter's VoIP service, "the touchstone of the information services inquiry is whether Spectrum Voice acts on the customer's information – here a phone call – in such a way as to 'transform' that information… By altering the protocol in which that information is transmitted, Charter Advanced's service clearly does so."[8]

The reasoning in *Charter Advanced* bolsters the reasonableness of the Notice's proposed conclusion insofar as broadband Internet access service offerings transform the form or content of users' information in many ways beyond "net protocol conversion" for certain VoIP offerings. As the Notice correctly observes, broadband ISPs "routinely change the form or content of information sent over their networks – for example, by using firewalls to block harmful content or using protocol processing to interweave IPv4 with IPv6 networks."[9] Indeed, broadband ISPs generate, acquire, store, transform, process, retrieve, utilize, and make information available to users in many ways beyond those briefly identified in the Commission's proposal.

[7] *Charter Advanced Services (MN), LLC, v. Lange* (hereinafter "*Charter Advanced*"), No. 15-3935 (U.S. Dist. Ct. Minn. May 8, 2017), Slip Op. at 10-14.
[8] *Id.*, Slip Op. at 13.
[9] Notice, at ¶ 30.

Significantly, a broadband ISP need only offer the *capability* for any one of the delineated statutory functions to fit within the definition of an information service.[10] There are two senses in which the term "capability" appears to bear on the definition of an information service. First, capability refers to the service's necessary enabling of functions by the end user. It is in this sense that the Notice refers to capability. That is, the Notice correctly recognizes that "offering Internet access is precisely what makes the service capable of 'generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information' to consumers" via the Internet.[11]

Second, capability refers to the potential or opportunity for an end user to make use of the functions being enabled by the service—regardless of whether such functions are actually used. In is in this other sense that the court in *Charter Advanced* refers to capability:

> [T]he mere fact that Spectrum Voice does not always involve protocol transformation does not render the service any less of an 'offering' of information services. At no point does the Telecommunications Act suggest or require that a customer use an information service's transformative features all the time. Indeed, the very language of the definition of an 'information service,'—which merely mandates that there be an 'offering of a *capability*' to, *inter alia*, transform information—belies such a conclusion.[12]

The Commission's *Cable Modem Order* (2002) "recognized that broadband Internet users often used services from third parties."[13] That order – which declared cable modem service an information service "regardless of whether subscribers use all of the functions provided as part of a service" – was affirmed by the Supreme Court in *NCTA v. Brand X* (2005).[14] For purposes of determining whether an offering satisfies the statutory definition of a Title I

[10] *Id.,* at ¶ 28.
[11] *Id*., at ¶ 28.
[12] *Charter Advanced*, Slip Op. at 13-14.
[13] FCC, Inquiry Concerning High-Speed Access to the Internet Over Cable & Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, GN Docket No. 00-185, CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking ("*Cable Modem Order*") (2002).
[14] *See* Notice, at ¶ 28 (quoting *Cable Modem Order*, at ¶ 38); 545 U.S. 967.

"information service," it is therefore irrelevant if, as the *Title II Order* (2015) stated, "consumers are very likely to use their high-speed Internet connections to take advantage of competing services offered by third parties."[15] Indeed, even if broadband Internet access service "is useful to consumers today primarily as a conduit" for accessing content, applications, and services by third parties,[16] such state of affairs would not determine the definitional outcome. The *Title II Order*'s conclusion does not have anything like universal assent. But even if true, it is by virtue of being an Internet "conduit" that broadband Internet access service is capable of 'generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information' to consumers." In this sense, the conduit and information processing elements are an inextricably linked offering comprising an information services offering.

Although the *Cable Modem Order*'s conclusion that cable modem service is an information service was not challenged in *Brand X*,[17] the Supreme Court nonetheless affirmed the underlying logic of that classification decision. More particularly, *Brand X* upheld the reasonableness of the Commission's conclusion that an end-user accessing third-party websites uses a cable company's information service even when the end-user is not accessing the cable company's own website, email, service, or personal web page.[18] The *Cable Modem Order* concluded – and the Supreme Court found reasonable – that even when accessing third-party sites, DNS and caching functions provided by cable companies constituted part of the information service being provided.[19]

[15] FCC, In the Matter of Protecting and Promoting the Open Internet, WC Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order ("*Title II Order*"), at ¶ 347 (2015).
[16] *Title II Order*, at ¶ 350.
[17] 545 U.S., at 988.
[18] *Id.*, at 999-1000.
[19] *Id.*, at 998-999.

Declaring broadband information access service to be an information service constitutes the proper interpretation of the statutory text and context. Moreover, to the extent the statutory language is unclear – and we do not agree it is – then following *Brand X*, the Commission's proposal to reclassify broadband Internet access services under Title I would be entitled to *Chevron* deference by the courts and surely be upheld.

B. Under the Text and Structure of the Act, the FCC Has a Reasonable Basis for Concluding that Broadband Internet Access Services Do Not Meet the Definition of a Title II Telecommunication Service

Broadband Internet access service does not constitute "telecommunications," as defined in Section 3, nor does it fit within that section's definition of a "telecommunications service." Section 3 of the Act defines a "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."[20] Section 3 further defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."[21]

When it comes to broadband Internet access service, end users do not specify transmission points "without change in the form or content of the information as sent and received."[22] Routing decisions are typically based on network architecture. End users may have little or no specific knowledge of the points where information is being sent, restored, or retrieved – that is, end users frequently have little to no awareness of the physical location of servers, the traffic exchange routes between different networks, the whereabouts of edge caching of popular content, or the storage location of content delivery networks. Further, the form or

[20] 47 U.S.C. § 153(53).
[21] 47 U.S.C. § 153(50).
[22] 47 U.S.C. § 153(50). *See also* Notice, at ¶ 29.

content of information sent and received frequently undergoes change as a result of broadband ISP protocol processing for delivery and receipt. For example, for an end user to be able to surf the web, desired domain names must be translated into IP addresses. And as the Notice observes, IP addresses may not even specify where information is transmitted to or from.[23] IPv4 to IPv6 transformations or other network protocol conversions such as those that enable VoIP applications to interconnect with other services also constitute routine changes in the form or content of information.[24] Anti-virus, anti-spam, firewalls, and other security-related functions also result in changes to the form or content of information being sent or received by end users.[25]

Broadband Internet access service is *not* a "telecommunications service" because it is an offering of integrated information and transmission functionalities. From a techno-functional perspective, broadband ISPs do not offer, and end user consumers do not purchase, a standalone transmission service. Moreover, end user consumers perceive, even if tacitly, that broadband ISPs are offering a functionally integrated service. They do not perceive that they are purchasing transmission as a standalone service.

The Notice's proposal that broadband Internet access service is not a telecommunication service under Title II as well as the proposal's underlying reasoning are consistent with both the classification decision and the rationale of the *Cable Modem Order*.[26] The order's classification decision and its underlying reasoning – based on Commission judgments about techno-functional aspects and end user perspectives – was reviewed and upheld by the Supreme Court's decision in *Brand X*.

[23] Notice, at ¶ 29 (internal cite omitted).
[24] *See id*., at ¶ 30; *Charter Advanced*, Slip Op. at 13.
[25] Notice, at ¶ 30.
[26] *See id*., at ¶¶ 29-33.

The Supreme Court concluded in *Brand X* that "the transmission component of cable modem service is sufficiently integrated with the finished service to make it reasonable to describe the two as a single, integrated offering."[27] According to the Court, "the high-speed transmission used to provide cable modem service is a functionally integrated component of that service because it transmit data only in connection with the further processing of information and is necessary to provide Internet service."[28] Likewise, the Supreme Court in *Brand X* affirmed the *Cable Modem Order*'s rationale from an end user perspective: "Seen from the consumer's point of view… cable modem service is not a telecommunications offering because the consumer uses the high-speed wire always in connection with the information-processing capabilities provided by Internet access, and because the transmission is a necessary component of Internet access."[29] The Supreme Court recognized that the Communications Act did not require that functionally integrated components of the service offered to consumer be broken out and separately described as distinct offerings to end user consumers.[30]

Declaring that broadband information access service is not a telecommunications service involves straightforward interpretation and application of statutory terms. Structural considerations bolster this conclusion.[31] In subjecting broadband Internet access services to public utility regulation, the *Title II Order* simultaneously forbore from applying numerous common carrier regulatory provisions to broadband ISPs. This was a most peculiar application of the statutory structure that gave every appearance of being contrived or jerry-rigged simply to reach the Commission's desired pro-regulatory result. As Senior Judge Stephen Williams observed in *U.S. Telecom v. FCC* (2016), "the Commission's massive forbearance [came]

[27] 545 U.S. at 990.
[28] *Id.*, at 998.
[29] *Id.,* at 998.
[30] *Id.*, at 991.
[31] *See* Notice, at ¶ 33.

without findings that the forbearance is justified" by the analytical standards set forth under Section 10 of the Communications Act, rendering the Commission's Title II reclassification further suspect.[32] It is surely reasonable for the Commission to conclude that broadband Internet access service is not a telecommunication service and thereby avoid this anomalous application of Title II.

Further, Section 332 of the 1996 Act also precludes the Commission from imposing public utility regulation on mobile broadband Internet access services. In sum, Section 332 provides that "private mobile service,"[33] which is any mobile service that is not interconnected with the public switched network, "shall not… be treated as a common carrier."[34] Section 332 recognizes a mutually exclusive category of "commercial mobile service" that is interconnected with the public switched network and subject to common carrier regulation.[35] The *Title II Order*'s redefinition of the public switched network to encompass networks using IP addresses as well as telephone numbers[36] – in effect, to redefine the public telephone network to mean the Internet – is utterly far-fetched. It is certainly reasonable for the Commission to conclude that that novel interpretation of the term is mistaken or at least less likely correct than its prior, widely accepted interpretation.

Finally, the Commission can be doubly confident in its proposal to rescind the *Title II Order*'s classification decision because *Brand X* makes plain that the Notice's proposal that broadband Internet access services do not fit within Title II would be entitled to *Chevron* deference.[37]

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[32] *United States Telecom Association v. FCC*, 825 F.3d 674, 775, (D.C. Cir 2016) (Williams, J., concurring in part and dissenting in part).
[33] 47 U.S.C. § 332(d)(3).
[34] 47 U.S.C. § 332(c)(2).
[35] 47 U.S.C. § 332(d)(1).
[36] *See Title II Order*, at ¶ 391.
[37] *See* 545 U.S. at 980-982.

III. THE FCC DOES NOT HAVE AUTHORITY UNDER TITLE II TO REGULATE BROADBAND ISPs LIKE COMMON CARRIERS

A. Reclassification of Broadband as a Title II Telecommunications Service Involves a Major Question of Political and Economic Significance, Requiring a Clear Statement of Authority from Congress

According to Supreme Court jurisprudence, an agency's interpretation of a statutory provision that implicates a "major question" of "deep economic and political significance does not receive *Chevron* deference.[38] A clear express statement of congressional authority is necessary to authorize agency regulation in the context of a major question. Implicit authorization is insufficient.[39] Because reclassifying broadband Internet access services under Title II involves a major question and because Congress nowhere provided clear authorization for such reclassification decision – but instead foreclosed such reclassification based on a *de novo* review of the text, structure, and purpose of the Communications Act – the Commission does not have authority to subject those services to public utility regulation.

Reclassifying broadband Internet access service as a "telecommunications service" and subjecting it public utility regulation surely involves a major question and therefore requires a clear statement of authority by Congress. A succinct explanation why the Title II reclassification of broadband Internet access service falls under the major questions doctrine is provided by Professor Daniel Lyons, a member of the Free State Foundation's Board of Academic Advisors:

> Like *Brown & Williamson*, the agency reversed course to assert jurisdiction over a politically volatile issue. And like the Affordable Care Act's insurance exchanges,

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[38] *See, e.g., Utility Air Regulatory Group v. EPA*, ___ U.S. ___, 134 S.Ct. 2427, 2444 (2014) ("We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast economic and political significance"). For a brief background on the major questions doctrine and its application to the *Title II Order*, see Daniel A. Lyons, "Net Neutrality's Path to the Supreme Court: *Chevron* and the 'Major Questions' Exception," *Perspectives from FSF Scholars*, Vol. 11 No. 21 (2016), at 6, available at: http://www.freestatefoundation.org/images/Net_Neutrality_s_Path_to_the_Supreme_Court_-_Chevron_and_the_Major_Questions_Exception_062416.pdf. ;

[39] *See King v. Burwell*, ___ U.S. ___, 135 S.Ct. 2480, 2488-2489 (2015). *See also* Lyons, "Net Neutrality's Path to the Supreme Court" at 5-6.

> the Internet is a matter of "deep economic and political significance." The FCC has explained that the Internet "drives the American economy and serves, every day, as a critical tool for America's citizens to conduct commerce, communicate, educate, entertain, and engage in the world around them." Like the ACA, it involves "billions of dollars" and affects "hundreds of millions of consumers across the country and around the world." Once relegated to a wonky corner of regulatory utility law, the question of how to regulate broadband providers has become a "policy decision" of considerable "economic magnitude," as evinced by both the four-million-plus comments filed in the Open Internet proceeding and President Obama's unprecedented decision to publicly pressure an independent agency into adopting it. Like the ACA, the far-reaching ramifications of the FCC's jurisdictional power grab strongly suggests that this is "one of those cases" where the Court should "hesitate before concluding that Congress intended such an implicit delegation" of authority to the agency.[40]

In *USTelecom v. FCC*, Judge Brett Kavanaugh ably described the significance of the *Title II Order*'s reclassification decision in terms of its transformation of structural power relationships involving broadband ISPs and government regulators as well as the fundamental technological implications of such transformation:

> The net neutrality rule is a major rule because it imposes common-carrier regulation on Internet service providers. (A common carrier generally must carry all traffic on an equal basis without unreasonable discrimination as to price and carriage.) In so doing, the net neutrality rule fundamentally transforms the Internet by prohibiting Internet service providers from choosing the content they want to transmit to consumers and from fully responding to their customers' preferences. The rule therefore wrests control of the Internet from the people and private Internet service providers and gives control to the Government. The rule will affect every Internet service provider, every Internet content provider, and every Internet consumer. The financial impact of the rule - in terms of the portion of the economy affected, as well as the impact on investment in infrastructure, content, and business - is staggering. Not surprisingly, consumer interest groups and industry groups alike have mobilized extraordinary resources to influence the outcome of the policy discussions.[41]

Under Supreme Court jurisprudence, when the major questions doctrine applies, agency interpretations of statutory provisions at issue do not receive *Chevron* deference. Instead, under

[40] Lyons, "Net Neutrality's Path to the Supreme Court," at 6.
[41] No. 15-1063, 2017 WL 1541517 (denial of rehearing *en banc*)(Kavanaugh, J., dissenting).

such circumstances the courts are required to interpret statutes *de novo* for a clear statement of congressional authorization.[42]

B. Congress Did Not Provide the FCC with a Clear Statement of Authority to Reclassify Broadband Internet Access Service Under Title II

Based on the statutory analysis offered above in Section II, it is evident that Congress made no clear statement authorizing the Commission to reclassify broadband Internet access service as a telecommunication service under Title II. Importantly, *Brand X*'s holding that the "offering" of a telecommunications service is ambiguous does not eliminate the requirement of a clear statement of authority for Title II reclassification of broadband Internet access service. As Judge Brown explained in *USTelecom v. FCC*: "The mere fact that a 'statutory ambiguity' exists for some purposes does not mean it authorizes the agency to reach major questions—statutory context and the overall scheme must be considered."[43] Judge Brown persuasively argued that the structural background to the 1996 Act indicates that Congress foreclosed the idea that broadband Internet access service could be reclassified under Title II: "By incorporating FCC's distinction between 'enhanced service' and 'basic service' into the statutory scheme, and by placing Internet access on the 'enhanced service' side, Congress prohibited the FCC from construing the 'offering' of 'telecommunications service' *to be* the 'information service' of Internet access."[44]

In keeping with the understanding that the *Title II Order*'s reclassification decision involves a major question, Judge Kavanaugh similarly recognized the implications for ambiguous provisions of the law: "*Brand X*'s finding of statutory ambiguity cannot be the *source* of the FCC's authority to classify Internet service as a telecommunications service. Rather, under the major rules doctrine, *Brand X*'s finding of statutory ambiguity is a *bar* to the FCC's authority

[42] *See Burwell*, 135 S.Ct. at 2488-89.
[43] *Id*. (Brown, J., dissenting), Slip Op. at 21.
[44] *Id.* (Brown, J., dissenting), Slip Op. at 22 (emphasis in the original).

to classify Internet service as a telecommunications service."[45] In other words: "*Brand X*'s finding of ambiguity by definition means that Congress has not clearly authorized the FCC to issue the net neutrality rule. And that means that the net neutrality rule is unlawful under the major rules doctrine."[46]

Indeed, in 1996, Congress stated in Section 230 of the Telecommunications Act that it is the policy of the United States "to encourage the vibrant and competitive free market that presently exists for the Internet and other interactive computers, unfettered by Federal and State regulation."[47] It is hard to imagine a more clear statement by Congress that the Commission lacks authority to regulate ISPs as common carriers.

IV. THE FCC SHOULD RECLASSIFY BROADBAND INTERNET ACCESS SERVICES AS TITLE I INFORMATION SERVICES AND REPEAL ITS HARMFUL PUBLIC UTILITY REGULATION OF THOSE SERVICES

A. Light Touch Approach Under Title I More Suited for Dynamic Technological and Market Conditions

When markets are dynamic and competitive, the optimal approach for promoting future innovation, investment, and consumer welfare is, at most, a light-touch regulatory policy. Repeal of the Commission's heavy-handed public utility regulatory approach is necessary because today's broadband Internet access services market is clearly dynamic, and therefore ideally suited for the light-touch regulatory approach under Title I. Indeed, this market emerged in a light-touch regulatory environment, around which a bipartisan consensus existed prior to the *Title II Order*. Title I classification of broadband Internet access services was a part of that consensus.

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[45] *Id.* (Kavanaugh, J., dissenting), Slip Op. at 17.
[46] *Id.* (Kavanaugh, J., dissenting), Slip Op. at 18.
[47] 47 U.S.C. § 230(b)(2). *See also* Notice, at ¶¶ 31-32 (discussing terms contained in 47 U.S.C. §§ 230(f)(2) and 231(e)(4) indicating Congress deemed "Internet access service" to be an "information service" and *not* a "telecommunications service").

In that light-touch regulatory environment, the broadband market was shaped and re-shaped by successive waves of innovation, backed by strong entrepreneurial investment. The new products, and services, and competitors that make up today's convergent, digital, and IP-based broadband market are in no small part attributable to the innovation- and investment-friendly regulatory climate provided under the Title I. For consumers, technological innovation backed by investment and spurred by competition has resulted in faster speeds, more reliable services, wider capacity for data-rich services, including live online gaming and HD video streaming. The last two decades have seen mobile wireless technology transition from analog to digital and undergo multi-generational network technology upgrades. In particular, mobile broadband platforms have enabled the emergence of the thriving smartphone and tablet device market segments – along with the digital apps market segment that presents low barriers to entry and high value to consumers. Broadband Internet access services have furthered the ongoing, drastic reshaping of the competitive landscape for video services and drastically transformed consumer consumption of video content. Demand for over-the-top (OTT) video services, enabled by high-speed Internet access, has skyrocketed. By early 2017, there were more than 140 million subscriptions to OTT video services such as Netflix, AmazonPrime, and Hulu.[48] Emergence of these valuable services, are characteristic of a vibrant market, not a static or monopolistic market.

The broadband market's competitiveness is reflected in the choices that consumers enjoy across a range of competing platforms. According to data contained in the *Internet Access*

[48] *See* Stephanie Pandolph and Jonathan Camhi, "Amazon Prime subscribers hit 80 million," *Business Insider* (April 27, 2017), available at: http://www.businessinsider.com/amazon-prime-subscribers-hit-80-million-2017-4; Tom Huddleston, Jr. "Netflix Has More U.S. Subscribers Than Cable TV," *Fortune* (June 15, 2017), available at: http://fortune.com/2017/06/15/netflix-more-subscribers-than-cable/; Hulu, Press Release: "Hulu Goes Bigger and Bolder at 2016 Upfront Presentation, Unveils +30% Growth in Subscribes, New Programming Deals and Ad Partnerships (May 4, 2016), available at: https://www.hulu.com/press/hulu-goes-bigger-and-bolder-at-2016-upfront-presentation-unveils-30-growth-in-subscribers-new-programming-deals-and-ad-partnerships/.

Services Report: Status as of June 30, 2016 (2017), 79% of the census blocks with housing units were served by three or more broadband ISPs offering speeds of 10 Mbps or higher, with another 18% served by two or more providers offering speeds of 10 Mbps or higher.[49] Also, 90% of US Census Blocks with housing units were served by three or more residential broadband ISPs offering speeds of with 3Mbps or higher, with the remaining 10% of census blocks served by two or more residential broadband ISPs offering the same speeds.[50] Meanwhile, increasing numbers of census blocks are served by multiple providers offering download speeds of 25 Mbps+ or 100 Mbps+. As of June 30, 2016, approximately 57% of fixed residential broadband connections were at least 25 Mbps and nearly 18% of fixed residential broadband connections were at least 100 Mbps.[51]

Consumer choice includes access to competing mobile broadband ISPs. According to the *Nineteenth Wireless Competition Report* (2016), even as of December 2015, 95.9% of the U.S. population were served by three or more 4G LTE mobile service providers and 89.1% were served by four or more providers.[52] According to Ookla, the average 4G download speed climbed to 16.61 Mbps during the first half of 2016.[53] And the Commission reported that, as of December 2015, satellite providers were offering broadband services to 99.1% of developed census blocks at download speeds of at least 10 Mbps.[54] Since December 2015, it is acknowledged that the speeds offered by wireline, wireless, and satellite providers have

[49] FCC, *Internet Access Services Report: Status as of June 30, 2016* ("*Internet Access Services Report*") (2017) at 6.
[50] *Id.*, at 6
[51] *Id.*, at 3.
[52] FCC, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 16-137, *Nineteenth Report* ("*Nineteenth Wireless Competition Report*") (September 23, 2016), at 30-31 ¶ 39 (internal cite omitted).
[53] Ookla, "Speedtest Market Report" (August 3, 2016), available at: http://www.speedtest.net/reports/united-states/.
[54] *Internet Access Report*, at 6.

increased, in some instances dramatically and ubiquitously. For example, HughesNet now offers ubiquitous satellite broadband service at a download speed of 25Mbs.[55]

In view of these dynamic competitive conditions in the broadband market, reclassification of broadband Internet Access service as a Title I information service is the policy choice best designed for perpetuating the market's dynamism.

B. The Title II Order's Imposition of Public Utility Regulation on Broadband Internet Access Services is Unsupported by Findings of Market Power and Consumer Harm

Given the technological dynamism that characterizes the broadband Internet services market, any regulatory intrusion by the Commission generally should be predicated on the finding of demonstrated threat of an abuse of market power and a concomitant threat of consumer harm. However, the *Title II Order* was unsupported by findings of market power and it cited no evidence of consumer harm. In fact, the *Order* stated that the Commission "need not conclude that any specific market power exists in the hands of one or more broadband providers in order to create and enforce these rules."[56] And with respect to its imposition of public utility regulation on broadband Internet access services, the *Order* similarly stated that "these rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential."[57]

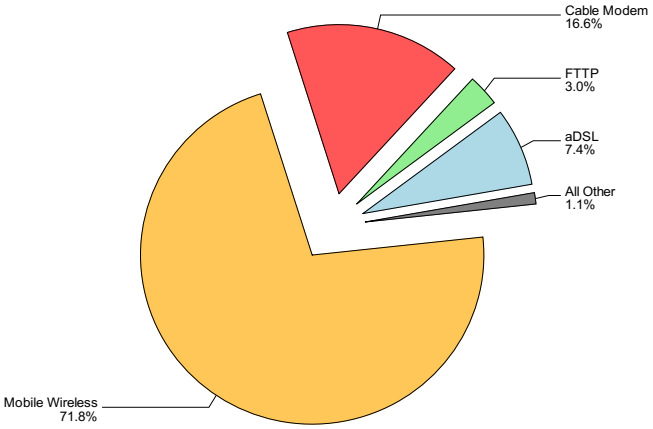
The *Title II Order*'s disavowal of any connection between its imposition of regulation and market power is revealing, because actual market data reveals that the broadband Internet access services market is characterized by competition. The dynamic broadband marketplace is

[55] Hughes, Press Release: "Hughes Announces HughesNeet Gen5 High-Speed Satellite Internet Service" (March 7, 2017), available at: https://www.hughes.com/who-we-are/resources/press-releases/hughes-announces-hughesnet-gen5-high-speed-satellite-internet?locale=en.
[56] *Title II Order*, at ¶ 11, fn. 12.
[57] *Id.*, at ¶ 11, fn. 12.

the locus of $1.5 trillion in investment since 1996.[58] Investment-backed innovation and competition has encouraged deployment of high-speed next-generation networks throughout the United States. This robust competition discourages broadband ISPs from harming consumers because 99% of consumers have the ability to switch between multiple providers.[59] In fact, during the time since the *Title II Order* was adopted, the broadband market has become even more competitive due to further advances in fiber, cable, mobile, and satellite technologies

An important aspect of the broadband market's dynamism, erroneously overlooked by the *Title II Order*, is cross-platform or intermodal competition between multiple broadband technologies. Broadband ISPs offering service across cable, fiber, mobile, and satellite platforms compete with each other for consumers or even for proportions of multi-screening consumer data usage. The Commission must directly factor such competition into any analyses it conducts of the broadband market and into any policies it adopts pursuant to such analyses. As the graphs below show, mobile connections represent the largest percentage of the broadband market.

Figure 12
Connections by Technology as of June 30, 2016



[58] USTelecom, "Broadband Investment," (last visited July 14, 2017), available at: https://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment.
[59] *Nineteenth Report*, at 31, Chart III.A.2.

Source: *Internet Access Services Report: Status as of June 30, 2016*, Industry Analysis and Technology Division, Wireline Competition Bureau, (April 2017) at 16, Figure 12.

However, the *Title II Order* offered a skewed picture of intermodal competition, stating that "mobile broadband is not a full substitute for fixed broadband connections."[60] Around the time of the order's adoption, data showed that 10% of Americans had a mobile broadband connection but did not have a fixed broadband connection.[61] Since then, evidence from the National Telecommunications and Information Administration finds that consumers across all income levels are substituting mobile broadband for fixed broadband. For example, 29% of low-income consumers, 18% of middle-income consumers, and 15% of high-income consumers are mobile-only broadband users.[62] Data indicating that many Americans are switching providers and technologies for accessing broadband Internet access services evidences the market's dynamism and does not support the *Title II Order*'s imposition of public utility regulation on those services.

C. The Title II Order Relied on a Flawed "Virtuous Cycle"/"Gatekeeper" Theory

Despite a lack of findings of market power and consumer harm, the *Title II Order* sought to justify imposition of public utility regulation on broadband Internet access services based on its flawed "virtuous cycle" theory. The supposed key insight of the theory is that broadband ISPs control the point of Internet access between edge content providers and consumers. According to the order, their power as "gatekeepers" gives broadband ISPs "the incentive and the ability" to harm consumers by blocking content or discriminating against content providers.[63]

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[60] *Title II Order*, at ¶ 9.
[61] Aaron Smith, "U.S. Smartphone Use in 2015," *Pew Research Center*, (April 1, 2015), available at: http://www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015/.
[62] Giulia McHenry, "Evolving Technologies Change the Nature of Internet Use," NTIA, (April 19, 2016), Figure 2, available at: https://www.ntia.doc.gov/blog/2016/evolving-technologies-change-nature-internet-use.
[63] *Title II Order*, at ¶ 79.

Putting aside the lack of evidence of actual harm from any existing broadband ISP practices, the *Title II Order*'s virtuous cycle theory is little more than the standard economic analysis of the incentives of a monopolist or firm in a highly-concentrated market to restrict output in order to drive up prices. But for this theory to be plausible, two conditions must be met: The broadband ISP: (1) must have a large market share; and (2) must have some protection from new firms entering the market. Conversely, if the broadband ISP does not have a large market share and faces current competition, then any attempts to extract high and inefficient tolls will be defeated when customers switch to a competing provider. And if entry by other providers is reasonably easy, then even a firm that is currently a monopolist will see that any inefficient tolls it imposes will only give other providers more incentive to enter the market and take its customers. Notably, the *Title II Order*'s failure to make a finding that broadband ISPs possess market power means that it failed to provide support for a necessary condition for its virtuous cycle justification for imposing public utility regulation on broadband ISPs. Rather, broadband ISPs have no economic incentive or ability to benefit economically from blocking, throttling, or otherwise unreasonably discriminating against content since, according to the Commission's own report data, 99% of U.S. consumers enjoy a choice among competing mobile and fixed broadband ISPs.[64]

The *Title II Order*'s "gatekeeper" analysis also fails on account of the order's categorical assertion that "mobile broadband is not a full substitute for fixed broadband connections."[65] As discussed previously, the order's dismissal of intermodal competition is contradicted by data showing that 29% of low-income consumers, 18% of middle-income consumers, and 15% of

[64] *See, e.g.*, *Nineteenth Report*, at 31, Chart III.A.2; *Internet Access Services Report*, at 3..
[65] *Title II Order*, at ¶ 9.

high-income consumers are mobile-only users of broadband Internet access services.[66] Surely, such data regarding mobile-only broadband usage demonstrates that many consumers consider mobile broadband a substitutable for other broadband platforms, and that the *Title II Order* was wrong to cavalierly dismiss it.

Perhaps perceiving the logical shortcomings of imposing regulation designed for monopolistic markets in the absence of market power findings, the *Title II Order* relied on a false narrative that consumer "switching costs" are too high, creating monopoly power even when multiple broadband ISPs offer access in a given area. Such costs are said to include the time or money spent to switch from one provider to another. The order stated: "[R]egardless of the competition in the local market for broadband Internet access, once a consumer chooses a broadband provider, that provider has a monopoly on access to the subscriber."[67] Thus, quite absurdly, the order invoked the most extreme example of market power – that is, monopoly power – in rhetorical support of its "gatekeeper power" argument for imposing public utility regulation. But the emptiness of the order's "monopoly" label is manifested by the its express disavowal of any need to provide evidence of market power to justify its imposition of public utility regulation. Nor did the order take stock of the ferocity with which the ISPs fight for customers through various forms of marketing designed to induce switching.

Data regarding the substitutability of mobile broadband services for fixed broadband services also demonstrates that the order significantly overstated the barriers to consumer choice imposed by switching costs. Indeed, market data undermines the *Title II Order*'s statement that "switching costs are a significant factor in enabling the ability of mobile broadband providers to

[66] McHenry, "Evolving Technologies Change the Nature of Internet Use," Figure 2.
[67] *Title II Order*, at ¶ 80.

act as gatekeepers."[68] The *Eighteenth Wireless Competition Report* (2015), which is snapshot of the wireless market at the time the order was adopted, found that there is an ongoing trend to eliminate early termination fees and reduce switching costs among mobile providers. The *Eighteenth Report* stated that since 2013 there has been "a rapid shift from traditional postpaid contract plans to no-contract plans."[69] Bring your own device and handset leasing options are now commonplace with wireless service offerings. Further:

> [M]arketing tactics have increasingly focused on Early Termination Fee ('ETF') buyouts to encourage customers to switch from rivals. ETF buyouts typically include a cash payment or credit to reimburse ETFs for customers on traditional contract plans, or alternatively, to pay off the remaining balance of an [equipment installment plan] EIP, plus a separate device credit for trading in a customer's current handset.[70]

This market trend toward no-contract options and away from ETFs drastically undercuts concerns about wireless consumer lock-in or barriers to switching providers.

Although the *Title II Order* acknowledged this marketplace trend, the order nonetheless concluded that switching costs "continue to affect a large proportion of customers who do not elect to purchase their phones up front."[71] In others words, the Commission decided that if switching costs are deemed too high for any subset of consumers – a contention with which we do not necessarily agree – then all broadband ISPs across all technologies, "regardless of local competition," possess "gatekeeper power" and should be subject to Title II public utility regulation.[72]

In any event, the Commission's conclusion no longer reflects marketplace reality. The *Nineteenth Report* found that this trend of increasing switching incentives has continued. The

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[68] *Id.*, at ¶ 97.
[69] FCC, Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Including Commercial Mobile Services, WT Docket No. 15-125, *Eighteenth Report* ("*Eighteenth Wireless Competition Report*") (released December 23, 2015), at ¶ 73.
[70] *Eighteenth Wireless Competition Report*, at ¶ 90.
[71] *Title II Order*, at ¶ 99, fn. 220.
[72] *See id*., at ¶ 99, fn. 220.

Nineteenth Report cites examples of switching incentives from all four national mobile carriers, including plan buyouts, phone discounts, service discounts, and free trials.[73] It also cited plans by Verizon Wireless, Sprint, and AT&T to discontinue term contracts and equipment subsidies.[74] T-Mobile previously discontinued such offerings. Given these unmistakable trends and given that 87% percent of Americans have access to four or more mobile broadband ISPs with each of them attempting to pry consumers from the other,[75] the *Title II Order*'s mobile broadband switching rationale for public utility regulation is entirely unsupportable.

Moreover, according Professor Tim Brennan, former Chief Economist of the FCC and a member of the Free State Foundation's Board of Academic Advisers, the economics of the *Title II Order* regarding switching costs and broadband ISP incentives is "wrong": `

> Even if broadband providers have market power because subscribers are slow to switch broadband services, as the FCC claims, the FCC incorrectly found such providers lack an incentive to provide high-quality service. Broadband providers, in the FCC's scenario, will raise their prices up to where subscribers will consider switching. The better the broadband service, including content "neutrality" if that's what consumers want, the higher that switching price will be – establishing the incentive that the FCC denies.[76]

D. The Title II Order Has Harmed Broadband Network Investment

Evidence is emerging that the *Title II Order* is depressing broadband capital investment. An analysis by Free State Foundation Research Associate Michael Horney projected a decrease of $5.6 billion in broadband capital investment over 2015 and 2016. Mr. Horney used as his baseline a trend line generated from actual capital investment from 2003 to 2014. When new data

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[73] *Nineteenth Report*, at ¶ 87.
[74] *Id.*, at ¶ 86.
[75] *Id.*, at 31, Chart III.A.2.
[76] Tim Brennan, "Is the Open Internet Order an 'Economics-Free Zone'?", *Perspectives from FSF Scholars*, Vol. 11, No. 22 (June 28, 2016), at 2, available at: http://www.freestatefoundation.org/images/Is_the_Open_Internet_Order_an_Economics_Free_Zone_062816.pdf.

for actual investment in 2015 became available, Mr. Horney revised his estimate using the same methodology to project a decrease of $5.6 billion in broadband investment over 2015 and 2016.[77]

Hal Singer of the Progressive Policy Institute similarly estimated a drop in broadband investment of $3.6 billion in 2016 alone, or 5.6%, relative to a baseline of 2014 investment.[78] Meanwhile, George Ford of the Phoenix Center traces lost investment back to December 2010, when then-Chairman Julius Genachowski proposed Title II-like common carrier mandates for broadband Internet access.[79] Mr. Ford found that "over the interval 2011 to 2015, another $150-$200 billion in additional investment would have been made 'but for' Title II reclassification."[80]

Analysts have also convincingly rebutted the claim made by Free Press that, following the *Title II Order*, broadband capital investment increased by 5.3% between 2013-2014 and 2015-2016.[81] As Mr. Singer has pointed out, the Free Press's selected data set includes large non-broadband investments, including Sprint's leased handsets and certain AT&T investments by DIRECTV and a Mexican affiliate.[82] Also, Mr. Ford found that Free Press' data actually provides support for the $3.7 to $5.1 billion investment decline cited by Chairman Pai when

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[77] Michael Horney, "Broadband Investment Slowed by $5.6 Billion Since Open Internet Order" Free State Foundation Blog (May 5, 2017), available at http://freestatefoundation.blogspot.com/2017/05/broadband-investment-slowed-by-56.html.

[78] Hal Singer, "2016 Broadband Capex Survey: Tracking Investment in the Title II Era," March 1, 2017, available at https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era/.

[79] *See* FCC, Preserving the Open Internet; Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, *Report and Order* ("2010 *Open Internet Order*") (2010); reversed and remanded, *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

[80] George Ford, "Net Neutrality, Reclassification and Investment: A Counterfactual Analysis Net Neutrality, Reclassification and Investment: A Further Analysis, Phoenix Center for Advanced Legal and Economic Public Policy Studies (April 25, 2017), available at http://www.phoenix-center.org/perspectives/Perspective17-02Final.pdf.

[81] S. Derek Turner, "It's Working: How the Internet Access and Online Video Markets are Thriving in the Title II Era," Free Press (May 2017), available at: https://www.freepress.net/sites/default/files/resources/internet-access-and-online-videomarkets-are-thriving-in-title-II-era.pdf.

[82] Hal Singer, "The Days of Common Carriage for Broadband Are Numbered. Here's Why," *Forbes* (May 17, 2017), available at https://www.forbes.com/sites/washingtonbytes/2017/05/17/the-days-of-common-carriage-for-broadband-are-numbered-heres-why/#77d8ba7978fb.

announcing his intent to review the *Title II Order*.[83] And with respect to mobile broadband investment, CTIA's annual survey finds that wireless providers' investment declined from $32.1 billion in 2014 to $26.4 billion in 2016, a drop of $5.7 billion or 17.8%.[84]

E. Title I Reclassification of Broadband Internet Access Services Is a Reasonable Policy Choice

Under established administrative law principles, a federal agency may change its policy approach, as long as such change is consistent with its statutory authority and if it provides a well-reasoned explanation for such a change.[85] The Commission has ample reasons to change the public utility regulatory approach taken in the *Title II Order* and to reclassify broadband Internet access service as Title I information service subject to light-touch regulation.

As an initial matter, the Commission has ample basis for concluding that Title I classification for broadband Internet access services reflects a better interpretation of the Communications Act, based on its text, structure, and prior agency and judicial precedents. The textual basis for Title I reclassification was described in Section II. The Supreme Court's decision in *Brand X* expressly approved the same interpretation now proposed in the Notice. *Brand X* recognized that the functional integration of the underlying service turned on "the factual particulars of how Internet technology works and how it is provided, questions *Chevron* leaves to the Commission to resolve in the first instance...."[86] So too, the Notice's proposed determination regarding the functional integration of broadband Internet access services and the

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[83] George Ford, "Reclassification and Investment: An Analysis of Free Press' 'It's Working' Report," Phoenix Center for Advanced Legal and Economic Public Policy Studies (May 22, 2017), available at http://www.phoenix-center.org/perspectives/Perspective17-04Final.pdf..

[84] *Compare* Armand Musey, Summit Ridge Group, "CTIA 2014 Wireless Survey Suggests Maturing Industry" (July 13, 2015) available at: http://summitridgegroup.com/2014-ctia-wireless-industry-survey-suggest-maturing-industry/, with CTIA, "Wireless Snapshot 2017" available at: https://www.ctia.org/docs/default-source/default-document-library/ctia-wireless-snapshot.pdf.

[85] *See, e.g.*, *FCC v. Fox Televisions Stations, Inc*., 556 U.S. 502, 515-516 (2009).

[86] 545 U.S. at 991.

expectations of integrated service held by end users will receive judicial deference. Nothing in *US Telecom v. FCC* detracts from this conclusion.

Further, the Commission can reasonably conclude that Title I reclassification is best suited to the innovative and competitive conditions that characterize the broadband market. Conversely, the Commission can also reasonably conclude that Title II reclassification was unsupported by findings of market power and consumer harm, and that the underlying virtuous cycle theory for public utility regulation was misguided. These market-based considerations supporting Title I reclassification are described earlier in this section.

Additionally, the Commission can reasonably conclude that the *Title II Order*'s imposition of expansive public utility regulation according to broadly vague terms has harmed innovation and investment due to the regulatory uncertainty and threat of reduced return on investment. As described earlier in this section, analysts have concluded reductions in broadband infrastructure capital investment have occurred since Title II classification was first proposed that are at least partly attributable to direct and indirect regulatory costs, along with the uncertainty associated with potential sanctions for non-compliance. And according to administrative law precedents, in the event the Commission determines its predicted judgments "prove erroneous, the Commission will need to reconsider" its regulatory approach – which the Notice now does.[87]

Relatedly, the Commission can conclude that the harm to innovation and investment or evidence of such harm from the *Title II Order* outweighs the non-existent benefits to consumers that have resulted from that order. Moreover, the Commission has a reasonable basis, based on these considerations, to predict that investment will more likely increase if Title I classification is reinstated for broadband Internet access services. As the D.C. Circuit recognized in *US Telecom*

[87] *Aeronautical Radio v. FCC*, 928 F.2d 428, 445 (D.C. Cir. 1991)(cited in Notice, at ¶ 53).

v. FCC, the Commission's predictive judgments are reviewed according to a "highly deferential standard"[88] – and that standard is surely satisfied here. Indeed, the Commission has discretion to reorient its finite resources to advance its policy objectives of promoting broadband deployment and closing the digital divide, thereby serving identifiable needs rather than deploying regulation to combat illusory harms.

Finally, the Commission can also reasonably conclude that less intrusive regulatory mechanisms offer a better approach to addressing anticompetitive concerns. As will be discussed in Section VI, less intrusive alternative means of addressing anticompetitive broadband ISP practices include antitrust enforcement by the U.S. Department of Justice and Federal Trade Commission (FTC) and consumer protection enforcement by the FTC. To the extent that the Commission determines that ISPs should be subject to some form of FCC regulatory oversight with respect to their practices, the agency should rely on a narrowly circumscribed commercially reasonable standard that requires a showing, by clear and convincing evidence, of market power or consumer harm before the imposition of any prohibitions or sanctions. Such prohibitions or sanctions should only be implemented after a determination in an adjudicatory proceeding following the filing of a specific complaint.

V. THE FCC DOES NOT HAVE AUTHORITY UNDER SECTION 706 TO REGULATE BROADBAND ISP PRACTICES

A. Section 706 Does Not Provide FCC Independent Source of Authority to Regulate Broadband Internet Access Services

Section 706 of the Telecommunications Act of 1996 is a provision offering the Commission guidance in its exercise of other statutory powers to reduce regulatory burdens in light of market competition. The section does not provide a standalone source of authority for the

[88] 825 F.3d at 707.

Commission to impose new regulations on advanced telecommunications services. Accordingly, Section 706 is not a source of legal authority for the Commission to regulate broadband Internet access services.

A plain reading of Section 706's text, particularly within the deregulatory context of the 1996 Act and its emphasis on regulatory forbearance, strongly weighs against the revisionist approach to Section 706 reflected in the *Title II Order*. As a general matter, it strains credulity to think Congress tucked a major source of new regulatory authority into Section 706, a provision encouraging reductions in regulatory barriers to infrastructure investment. "Congress," the Supreme Court has held, "does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions – it does not, one might say, hide elephants in mouseholes."[89]

The D.C. Circuit Court of Appeals applied *Chevron* deference to the Commission's pro-regulatory reinterpretation of Section 706 in *Verizon v. FCC* (2014) and in *USTelecom v. FCC*.[90] At the very least, the Commission's invocation of Section 706 as a necessary predicate to Title II reclassification of broadband Internet access service and thus to imposing public utility regulation implicates a question of deep economic and political significance. Absent *Chevron* deference, the *Title II Order*'s interpretation and application of Section 706 in support of public utility regulation of broadband Internet access services is exceedingly dubious. The Commission should now withdraw that mistaken interpretation.

Indeed, Commissioner Michael O'Rielly has articulated persuasively a commonsense view of the deregulatory context in which Section 706 was originally adopted. As recounted by Commissioner O'Rielly at a Free State Foundation conference, accepting a pro-regulatory re-interpretation of what Section 706 means making "some wild assumptions":

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[89] *Whitman v. Amermican Trucking Associations*, 531 U.S. 457, 468 (2001).
[90] 740 F.3d 623; 825 F.3d 674.

> You would have to believe that a Republican Congress with a deregulatory mandate inserted very vague language into the statute to give complete authority over the Internet and broadband to the FCC, but then didn't tell a soul. It didn't show up in the writings, it didn't show up in the summaries. It didn't show up in any of the stories at the time.
>
> You would have to believe that the conference committee intended to codify Section 706 outside of the Communications Act, thereby separating it from the enforcement provisions of the Act, Title V, but somehow we still expected it to be enforced. [The Communications Act was not amended to include Section 706.]
>
> You would have to believe that the congressional committees that went on to do an extensive review of FCC authority afterwards, and even proposed legislation to rein it in, in terms of FCC reauthorization legislation, that they went through that effort, but at the same time they had provided a secret loophole to the Commission to regulate.
>
> You would have to believe that when Congress is having extensive debates over the ability to regulate, or the ability to give the Commission authority to regulate net neutrality, at the same time they had already given the Commission this authority.
>
> You would have to believe that when Congress did legislate in this space, and more particularly when they legislated on certain edge providers in certain narrow instances mostly related to public safety, you would have to believe that they went through that extensive process, and then it didn't matter, the fact that they had already given the Commission that complete authority under Section 706.[91]

Commissioner O'Rielly concluded: "It's mindboggling to believe that all of those assumptions, and there are many more, are true. You would have to suspend your rational thought to get to that point."[92] Accordingly, the Commission should reject an interpretation of Section 706 that is necessarily based on so many implausible assumptions.

B. Prior FCC Precedents Correctly Construed Section 706 As Providing Guidance for Exercising Agency Powers Under Other Provisions

Importantly, in neither *Verizon v. FCC* nor *USTelecom v. FCC* did the D.C. Circuit purport to define decisively the boundaries of the Commission's Section 706 authority. Surely,

[91] The Free State Foundation's Sixth Annual Telecom Policy Conference, "A New FCC and a New Communications Act," Conversation with Commission Michael O'Rielly (March 18, 2014), *available at*: https://www.c-span.org/video/?318351-4/interview-michael-orielly.
[92] *Id.*

neither court decision required the Commission to adopt any of the new regulations then under review. Those decisions merely held that the pro-regulatory re-interpretation of Section 706 was not so arbitrary or capricious as to require its overruling under a deferential judicial standard.[93] Nothing in those decisions precludes the Commission from adopting a better-supported interpretation of a statutory provision that touches on the extent of the agency's regulatory authority. And nothing in those decisions prohibits the Commission from adopting an interpretation of Section 706 that is consistent with earlier agency precedents and that were similarly upheld by the D.C. Circuit according to a deferential standard.[94]

Prior Commission precedents recognized that Section 706 is not an independent grant of agency authority but rather a hortatory deregulatory policy statement meant to guide agency action under other statutory sections. The Commission's 1998 *Advanced Services Order*, in particular, concluded that "the most logical statutory interpretation is that section 706 does not constitute an independent grant of authority."[95] This Commission interpretation was left undisturbed by the decision in *Comcast v. FCC* (2010).[96]

In light of Section 706's deregulatory context and its emphasis on forbearance and other means of reducing regulatory burdens, the Commission's earlier hortatory interpretation of that section is far more reasonable than the Commission's more recent pro-regulatory reinterpretation. The Commission should therefore re-adopt an interpretation of Section 706 that regards it as a source of guidance for exercising other regulatory powers, not an independent source of regulatory authority.

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[93] *See* 740 F.3d 623; 825 F.3d 674.
[94] *See, e.g., Ad Hoc Telecommunications Users Committee v. FCC*, 572 F.3d 903 (D.C. Cir. 2009).
[95] FCC, Deployment of Wireline Services Offering Advanced Telecommunications Capability, *et al*., Opinion and Order and Notice of Proposed Rulemaking ("*Advanced Services Order*"), 13 FCC Rcd 2401 (1998), at ¶ 77.
[96] 600 F.3d 642, 658-659 (D.C. Cir. 2010).

VI. FOLLOWING TITLE I RECLASSIFICATION, THE FTC AND DOJ HAVE AUTHORITY TO ADDRESS ANTICOMPETITIVE CONCERNS REGARDING BROADBAND ISP PRACTICES

A. The FTC and DOJ Have Authority to Address Antitrust Concerns Posed by Broadband ISP Practices

Even if the Commission rescinds its public utility regulation of broadband Internet access services and declines to impose new regulation, there are alternative legal protections for consumers and for market competition. The U.S. Department of Justice has authority to pursue legal action in instances where broadband ISPs engage in anticompetitive practices that constitute potential antitrust violations. And reclassification of broadband Internet access service as a Title I information service would restore the Federal Trade Commission's similar authority to pursue potential antitrust violations.

Antitrust law is premised on consumer welfare, not protecting competitors from competition. Antitrust enforcement is generally characterized by a case-by-case approach that is disciplined by microeconomic insights, requires factual evidence of actual market power problems or consumer harms, and clearly puts the burden of proof on complainants.

In May 2017, Abbott "Tad" Lipsky, Acting Director of the FTC's Bureau of Competition, described case-by-case enforcement by the FTC and private litigation as ready means to address any anticompetitive practices that might arise in the broadband Internet access services market. In particular, Mr. Lipsky rejected "the idea that a lessening of the regulatory burden on the FCC side would lead to a situation in which anticompetitive conduct was free to occur without fear of further consequence."[97] According to Mr. Lipsky: "That is demonstrably false. The FTC is waiting" and able to address anticompetitive concerns that might arise.[98]

[97] For a partial transcription of Mr. Lipsky's panel remarks at Free State Foundation's Ninth Annual Telecom Policy Conference on May 31, 2017, *see* Seth L. Cooper, "Why the FTC Should Oversee Broadband Internet Service

Professor Daniel Lyons, a member of FSF's Board of Academic Advisers, similarly has characterized broadband Internet access service regulation as "an antitrust and a consumer protection issue."[99] Recounting the FTC's antitrust analytical tools, including its test for market power, Professor Lyons stated:

> The FTC is well equipped to evaluate on a case-by-case basis whether a particular agreement is one that might harm consumers. Using robust law that's been developed from a number of different cases elsewhere in the economy… they have a broader scope informed by a lot more history than the Federal Communications Commission. I agree that the *ex post* review and flexibility the FTC brings is a lot better in a dynamic marketplace than the more rigid FCC *ex ante* rulemaking.[100]

Thus, the FTC's institutional competencies and case-by-case approach to anticompetitive conduct – as attested by Mr. Lipsky and Professor Lyons – bolster the basic direction set out in the Notice proposal. The FTC has wide-ranging experience in addressing anticompetitive practices. The Commission should therefore reactivate the FTC's antitrust authority regarding broadband ISPs by reclassifying broadband Internet access services as Title I information services. Reclassification under Title I would remove the Title II common carrier exception to FTC jurisdiction over broadband ISPs.

Mindful of DOJ and FTC authority to pursue antitrust violations by broadband ISPs, Title I reclassification of broadband Internet access services should not be understood as an abandonment of regulatory oversight of the market. Rather, it should be understood as a policy

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Providers," *Free State Foundation Blog* (June 9, 2017), available at: http://freestatefoundation.blogspot.com/2017/06/why-ftc-should-oversee-broadband_9.html. *See also* "Telecommunications Policy Conference, Part 4," C-SPAN.org (May 31, 2017) (video), available at: https://www.c-span.org/video/?429299-5/telecommunications-policy-conference-part-4.

[98] *See* Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers," (partially transcribing Mr. Lipsky's panel remarks).

[99] For a partial transcription of Professor Lyons' panel remarks at Free State Foundation's Ninth Annual Telecom Policy Conference on May 31, 2017, *see* Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers." *See also* "Telecommunications Policy Conference, Part 4," C-SPAN.org (May 31, 2017) (video).

[100] *See* Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers," (partially transcribing Professor Lyons' panel remarks).

determination that consumers and the broadband market can most effectively be protected by empowering agencies whose core competencies include enforcement of competition law.

B. FTC Has Authority Under the FTC Act to Address Unfair and Deceptive Trade Practices by Broadband ISPs Regarding Privacy and Other Matters

The *Title II Order* effectively stripped the FTC of jurisdiction over broadband ISP practices that are potentially harmful to consumers, including practices involving online privacy.[101] Following Congress's March 2017 repeal of the *Broadband Privacy Order* (2016), the Notice proposes to return privacy jurisdiction over broadband ISPs to the FTC.[102] The Commission should adopt this proposal, as the FTC's expertise and analytical approach toward privacy issues makes it the preferred agency for addressing online privacy practices across all digital platforms. With its jurisdiction restored, FTC would also be well suited to enforcing broadband ISP terms of service, including no-blocking, no-substantial degrading, and no-throttling terms.

In May 2017, Thomas Pahl, Acting Director of the FTC's Bureau of Consumer Protection, critiqued the *Broadband Privacy Order* and contrasted it with his agency's privacy policy:

> [T]he FCC chose a more rigid and prescriptive approach to broadband data security and privacy issues than the FTC's traditional case-by-case approach to these topics. The FCC's rules also set standards for broadband providers separate and apart from standards applicable to others in the online space, eschewing the FTC's more comprehensive approach.[103]

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[101] *See* Notice, at ¶ 66; *Title II Order*, at ¶ 462.

[102] *See* FCC, Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, Report and Order ("*Broadband Privacy Order*") (released November 2, 2016); U.S. Congress. Senate. *A joint resolution providing for congressional disapproval under chapter 8 of title 5, United States Code, of the rule submitted by the Federal Communications Commission relating to "Protecting the Privacy of Customers of Broadband and Other Telecommunications Services,"* 115th Cong. 1st sess. S.J.R. 34; Notice at ¶ 67.

[103] For a partial transcription of Mr. Pahl's panel remarks at Free State Foundation's Ninth Annual Telecom Policy Conference on May 31, 2017, *see* Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers." *See also* "Telecommunications Policy Conference, Part 4," C-SPAN.org (May 31, 2017) (video).

Free State Foundation scholars previously described the deeply problematic aspects of the Commission's repealed broadband privacy rules and the equally problematic aspects of Commission regulation of privacy in a March 2017 filing in the broadband privacy proceeding.[104] To briefly summarize here: First, the Commission lacks authority for sweeping regulation of broadband ISP privacy practices. That authority is further precluded by Congress's repeal of the *Broadband Privacy Order*. Second, singling out broadband ISPs for stringent privacy restrictions is arbitrary and capricious because ISPs do not uniquely possess personal information. There is a diversity of personal data collection that takes place across the Internet ecosystem and which is beyond the Commission's jurisdictional limits. Third, "opt-in" regimes such as the one adopted by the Commission unfairly disadvantage broadband ISPs and threaten to confuse consumers. This is because Google, Facebook, Amazon, and other major Internet companies that are the largest collectors of personal consumer data are subject only to less stringent opt-out requirements with respect to the same data that might be collected by ISPs. Fourth, consumer online privacy should be protected by equal rules under a single enforcement authority.

Reclassifying broadband Internet access services as a Title I information service and restoring FTC authority over broadband ISP privacy practices would alleviate those problematic aspects of FCC regulation of broadband privacy practices. Mr. Pahl described what the public could expect if the Commission adopts its Notice proposal and thereby returns jurisdiction over broadband privacy to the FTC:

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[104] The Free State Foundation, Reply Comments to Oppositions for Petitions for Reconsideration, Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106 (March 16, 2017), available at: https://ecfsapi.fcc.gov/file/1031625753193/FSF%20Reply%20Comments%20Re%20Protecting%20the%20Privacy%20of%20Customers%20of%20Broadband%20and%20Other%20Telecommunications%20Services%20031617.pdf.

> The FTC is ready, willing, and able to protect the data security and privacy of broadband subscribers . . . . We have a wealth of consumer protection and competition experience and expertise, which we will bring to bear on online data security and privacy laws. We will apply data security and privacy standards to all companies that compete in the online space regardless of whether the companies provide broadband services, data analysis, social media, or other services. Our approach would ensure the standards the government applies are comprehensive, consistent, and pro-competitive.[105]

In addition, reclassification of broadband Internet access services under Title I would effectively empower the FTC to oversee ISP compliance with their terms of service under its statutory authority relating to unfair and deceptive trade practices. There is industry near-consensus that end user subscribers to broadband Internet access service should not be subject to blocking, substantial degrading, throttling, or unreasonable discrimination by broadband ISPs. This consensus is widely reflected in the service terms that broadband ISPs furnish to their end user subscribers. With the FTC's jurisdiction restored, alleged breaches no-blocking, no-substantial degrading, no-throttling and other terms of service by ISPs could be investigated by the FTC and made the subject of enforcement actions.

C. The FTC Has Superior Institutional Capabilities to Address Broadband ISP Practices Regarding Privacy and Other Matters

Reclassifying broadband service as a Title I information service, thereby restoring FTC authority over broadband ISP privacy practices, will alleviate any claimed problematic aspects of FCC privacy regulation. The FTC describes itself as "an independent U.S. law enforcement agency charged with protecting consumers and enhancing competition across broad sectors of the economy."[106] The FTC's primary legal authority comes from Section 5 of the Federal Trade

[105] *See* Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers" (partially transcribing Mr. Pahl's panel remarks).
[106] U.S. Federal Trade Commission, "Privacy & Data Security Update" (January 2016), available at https://www.ftc.gov/reports/privacy-data-security-update-2015#privacy.

Commission Act, which prohibits unfair or deceptive practices in the marketplace.[107] It also has authority to enforce a variety of sector specific laws.

Maureen K. Ohlhausen, Acting Chairman of the FTC, speaking at the Free State Foundation's Eighth Annual Telecom Policy Conference in 2016, explained the FTC's expertise over privacy issues:

> Despite rumors to the contrary, the FTC is the primary privacy and data protection agency in the U.S., and probably the most active enforcer of privacy laws in the world. We have brought more than 150 privacy and data security enforcement actions, including actions against ISPs and against some of the biggest companies in the Internet ecosystem. (For our purposes here I consider data security to be a subset of privacy. So when I say "privacy" today I also mean data security.) The FTC has gained this expertise because of - not in spite of - our prudent privacy approach, which maximizes consumer self-determination.[108]

In addition to enforcement actions to address privacy and other consumer protection matters, the FTC's toolbox includes "conducting studies and issuing reports, hosting public workshops," and "developing educational materials for consumers and businesses."[109] The FTC's Bureau of Consumer Protection already includes a Division of Privacy and Identity Protection. This Division works closely with the FTC's other divisions, including the economists in its Bureau of Economics and the investigative staff in field offices across the country, which also have developed their own expertise in consumer protection matters.[110]

Acting Chairman Ohlhausen has also described the FTC's analytical approach to privacy protection:

> Specifically, our unfairness authority prohibits practices that cause substantial harm that is unavoidable by consumers and which is not outweighed by benefits

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[107] 15 U.S.C. § 45.
[108] Maureen K. Ohlhausen, Commissioner, U.S. Federal Trade Commission, "Privacy Regulation in the Internet Ecosystem," Free State Foundation Eighth Annual Telecom Policy Conference (March 23, 2016), available at https://www.ftc.gov/system/files/documents/public_statements/941643/160323fsf1.pdf.
[109] U.S. Federal Trade Commission, "Privacy & Data Security Update" (January 2016), available at https://www.ftc.gov/reports/privacy-data-security-update-2015#privacy.
[110] U.S. Federal Trade Commission, "About the Bureau of Consumer Protection Update" (visited June 25, 2017), available at https://www.ftc.gov/about-ftc/bureaus-offices/bureau-consumer-protection/about-bureau-consumer-protection.

> to consumers or competition. Practices that the FTC has found unfair consistently match practices that consumers generally reject. For example, we brought an unfairness case against a data broker that sold highly sensitive financial information to individuals whom the data broker knew or should have known were identity thieves.
>
> Thus, unfairness establishes a baseline prohibition on practices that the overwhelming majority of consumers would never knowingly approve. Above that baseline, consumers remain free to find providers that match their preferences, and our deception authority governs those arrangements. Establishing the baseline at the proper level is important. Too low, and we would not stop harmful practices that most consumers oppose. Too high, and we would prohibit services many consumers would prefer. If we set the privacy baseline too high, the privacy preferences of the few are imposed on the many. Our unfairness test's emphasis on real consumer harm and cost-benefit analysis helps ensure that the baseline is in the right place. And the FTC's procedural protections, such as review by our Bureau of Economics and mandatory Commission votes on settlements, create consensus and force changes to be incremental. Thus, privacy practices found by the FTC to be unfair are those that reflect consumer consensus.[111]

In contrast, since the FCC has not claimed regulatory authority over Internet privacy matters until recently, it is starting from scratch and attempting to build its expertise and protocols on the fly. The Commission's recent initiatives to better integrate economic analysis into its decisionmaking by conducting cost-benefit analyses and creating an Office of Economics and Data are welcome developments.[112] However, even if it were otherwise appropriate, developing the required expertise and institutional structures needed to effectively protect privacy would take considerable time. Redefining and establishing itself as the nation's new Internet privacy regulator is unnecessary when the FTC already has privacy oversight capabilities and a demonstrated track record regarding privacy protection.

Further, the Commission's misguided attempt to establish regulatory enforcement authority over online privacy enforcement broke with the long tradition of case-by-case

[111] Ohlhausen, "Privacy Regulation in the Internet Ecosystem."
[112] Ajit Pai, "Remarks of Federal Communications Commission Chairman Ajit Pai at the Hudson Institute: The Importance of Economic Analysis at the FCC," (speech, Washington, DC, April 5, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344248A1.pdf.

enforcement that had evolved at the FTC. The Commission did not identify a market failure or specific consumer harm that was not sufficiently addressed by the FTC's approach. Nor did the FCC conduct a cost-benefit analysis to balance the compliance costs and likely detrimental effects on broadband investment against the claimed benefits of more expansive privacy protections. Nor did the Commission attempt to establish a baseline for the proper level of enforcement, as described above by Acting Chairman Ohlhausen, to strike a balance between stopping harmful practices that most consumers oppose while avoiding prohibiting services most consumers would prefer. Despite this lack of evidentiary support and economic analysis, the Commission went forward with a new approach with uneven application.

As FTC Acting Director Pahl explained: "[T]he FTC is ready, willing, and able to protect the data security and privacy of broadband subscribers," with "a wealth of consumer protection and competition experience and expertise, which we will bring to bear on online data security and privacy laws."[113] The FTC's institutional competencies and case-by-case approach to anticompetitive conduct bolster the basic direction set out in the Notice. The Commission should follow through on its Notice proposal and return jurisdiction over broadband ISP privacy practices to the FTC, where it should be, and where a uniform enforcement regime, applicable alike to ISPs and Internet giants like Google and Amazon, can be implemented.

VII. DESPITE THE FOREGOING JURISDICTIONAL LIMITS, IF THE FCC NEVERTHELESS DETERMINES IT POSSESSES ANCILLARY AUTHORITY TO REGULATE BROADBAND INTERNET ACCESS SERVICES, IT SHOULD ADOPT A COMMERCIAL REASONABLENESS STANDARD FOR CASE-BY-CASE REVIEW OF ISP PRACTICES

If, as we have argued, the Commission reclassifies Internet access service as a Title I "information service" and also decides that Section 706 is not an independent source of

[113] Cooper, "Why the FTC Should Oversee Broadband Internet Service Providers" (partially transcribing Mr. Pahl's panel remarks).

regulatory authority, it may nevertheless conclude that it wishes to maintain some form of regulatory oversight over broadband ISP practices. If the Commission decides to do so in an exercise of whatever ancillary authority it may possess, it should ensure that any such remaining regulatory regime is narrowly circumscribed. In order to implement this circumscribed light touch regime, any prohibition or sanction the Commission proposes with respect to an ISP's broadband practices must be based on findings, supported by clear and convincing evidence, that the ISP possesses market power and that the alleged practice caused consumer harm.

A. The FCC May Have Circumscribed Ancillary Authority for Overseeing ISP Practices on a Case-by-Case Basis under a Commercial Reasonableness Standard

In upholding the *Cable Modem Order*'s classification of broadband Internet access service as an "information service," the Supreme Court in *Brand X* stated, in *dicta*, that "the Commission remains free to impose special regulatory duties on facilities-based ISPs under its Title I ancillary jurisdiction."[114] At the same time, the D.C. Circuit's decision in *Comcast v. FCC* rejected the Commission's prior "leaping from *Brand X*'s observation that the Commission's ancillary authority may allow it to impose some kinds of obligations on cable Internet providers to a claim of plenary authority over such providers."[115] That is, the D.C. Circuit first concluded there needed to be some statutory basis for the Commission to ground any putative exercise of ancillary authority over broadband Internet access services. Applying Supreme Court precedent, the D.C. Circuit also concluded that even if a statutory basis of authority is identified, the particular regulation at issue must be "reasonably ancillary to the effective performance of the Commission's various responsibilities."[116]

[114] 545 U.S. at 996.
[115] *See Comcast v. FCC*, 600 F.3d at 650.
[116] *Id.* at 646 (internal cite omitted).

Moreover, the scope of the underlying statutory provision is a critical factor in assessing reasonableness of the exercise of ancillary authority. In *Comcast v. FCC*, for example, the D.C. Circuit rejected the Commission's "expansive theory of ancillary authority" to regulate "*all* communication services, including those, like video-on-demand, over which it has no express regulatory authority" pursuant to Section 623 because that section provides only a "narrow grant of power."[117] In other words, the extent of regulatory control asserted over Title I services relative to the statutory provisions at issue is critical in assessing the reasonableness of the Commission's proffered exercise of ancillary authority. Moreover, the connection between the underlying statutory provisions and the claimed exercise of authority ancillary must be clearly identified and backed by reasoned explanation. The Commission's proffered exercise of ancillary authority failed in *Comcast v. FCC* because the underlying order failed to sufficiently identify the statutory basis and rationale for ancillary authority.[118] Other inherent limits on the Commission's ancillary authority also exist. For instance, the D.C. Circuit concluded in *Verizon v. FCC* that "common carrier treatment of "information service" providers and "commercial" mobile service providers… is undoubtedly prohibited."[119]

We do not propose in these initial comments to address the possible bases of whatever ancillary authority the Commission may possess to adopt a regulatory regime to oversee broadband ISP practices.[120] Instead, for present purposes, to the extent that the Commission is inclined to claim ancillary authority over Internet service provider practices, we urge that the exercise of any such authority be circumscribed and light touch. More specifically, one way the

[117] *Id*. at 661 (emphasis in original).
[118] *See id*. at 651-661.
[119] 740 F.3d at 655 (citing 47 U.S.C. §§ 153(51), 332(c)(2)).
[120] One alternative source of authority that the FCC may have for oversight of broadband ISP practices is attaching conditions to its grant of Universal Service Fund (USF) money to eligible communications carriers that are also ISPs. *See Direct Communications Cedar Valley, LLC v. FCC*, 753 F.3d 1015 (10th Cir. 2014) (holding that 47 U.S.C. § 254 did not unambiguously bar the Commission from conditioning USF funding on recipients' agreement to provide broadband Internet access services).

exercise of light touch regulation could be so circumscribed is by adoption of a properly defined "commercial reasonableness" standard that requires evidence of market power and consumer harm as a predicate for imposition of a regulatory sanction.

B. A Commercial Reasonableness Standard Should Be Enforced According to Deregulatory Presumptions on a Case-By-Case Basis

A "commercial reasonableness" standard should reflect both the limited nature of the Commission's ancillary authority over the broadband market and the competitive nature of the market. Today's broadband market is characterized by continuing innovation, with consumers having choice among competing wireline and mobile wireless broadband platforms. These background jurisdictional and market considerations require a policy framework that is presumptively deregulatory. That is, the commercial reasonableness standard should operate upon the presumption that broadband ISPs behave in ways that foster competition and enhance consumer welfare. At the same time, the commercial reasonableness standard should permit the presumption to be rebutted by the proffer of actual evidence of anticompetitive conduct. Absent clear and convincing evidence of market failure and consumer harm, the broadband ISPs' practices would be deemed commercially reasonable. The rebuttable presumption – which is really an evidentiary presumption – should run in favor of marketplace freedom and against regulatory restrictions.

The commercial reasonableness standard should be enforced through case-by-case adjudication. Procedural rules should be adopted requiring the filing of an individual complaint to initiate an adjudication alleging that a specified broadband ISP practice is unreasonable. To be considered by the Commission, a complaint would need to provide evidence of consumer harm or evidence of market failure caused by the practice specified. In reviewing the complaint and conducting the adjudication, the evidentiary burden of rebutting the presumption of

reasonableness would rest on the complainant. Adopting such procedural rules will help prevent abuse of the adjudicatory process and regulatory overreach.

C. The Commercial Reasonableness Standard's Analytical Factors Should be Keyed to Market Power and Consumer Harm

The commercial reasonableness standard should incorporate requirements for findings of market power and consumer harm. These concepts are rooted in microeconomic analysis and oriented to the protection of consumer welfare, not competitor concerns. An analytical standard keyed to market power and consumer harm regards well-functioning markets as the conduits most-suited to enhancing consumer welfare and encouraging investment and innovation. At the same time, such a standard proscribes market conduct in particular circumstances where such conduct has actual or likely anticompetitive or anti-efficiency effects that undermine the welfare of consumers. The Commission should therefore draw on antitrust insights in developing and applying its commercially reasonable standard.

Further, by making affirmative findings of market power and consumer harm prerequisites for the imposition of any sanctions, the commercial reasonableness standard would prevent the Commission from regulatory overreach or arbitrariness. Based on the record established and an analysis of the relevant factors, the Commission would only prohibit broadband ISPs from engaging in "commercially unreasonable" practices determined to constitute an abuse of substantial, non-transitory market power and that cause demonstrable harm to consumers. Thus, the Commission would focus, *post hoc*, on specific allegations of consumer harm in the context of a particular marketplace context.

The *Data Roaming Order* (2011) provides an agency precedent for establishing a commercial reasonableness standard to govern broadband Internet access services. In that *Order*, the Commission's standard was based on factors that "relate to public interest benefits and costs

of [an] arrangement offered in a particular case, including the impact on investment, competition, and consumer welfare and whether a particular data roaming offering is commercially reasonable."[121] Drawing on market power and consumer harm concepts articulated above, the Commission similarly could identify more specific factors in identifying the "commercial reasonableness" of broadband ISP practices. However, consistent with the above, the Commission should depart the *Data Roaming Order* insofar as that order failed to broadly apply a presumption of reasonableness outside the context of signed agreement terms.[122] As previously indicated, the substantial investment, thriving innovation, and availability of choice to consumers in the broadband market warrants the presumption that broadband ISPs' practices are reasonable. Any specific factors the Commission might identify for assessing the commercial reasonableness of broadband ISP practices, based on market power and consumer harm criteria, could be considered by the Commission for purposes of determining whether a complainant has presented enough evidence to rebut the deregulatory presumption.

D. Paid Prioritization Agreements Benefit Consumers and Should Be Permitted Absent Specific Findings Made on a Case-By-Case Basis

Paid prioritization arrangements are common throughout the economy. Evidence from other markets shows that paid prioritization arrangements that develop without regulatory intervention generally lead to more capital investment and benefit consumers.

Many states now offer optional "fast lanes" on highways, for a toll, as a way of attracting investment for highway projects.[123] Commuters who want to avoid the tolls are not excluded

[121] FCC, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265, Second Report and Order ("*Data Roaming Order*") (April 7, 2011), at ¶ 86, upheld by *Cellco Partnership v. FCC*, 700 F.3d 534, 548 (D.C. Cir. 2012).
[122] *See Data Roaming Order*, at ¶ 81; *cf*. FCC, Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services, WT Docket No. 05-265, Declaratory Ruling, ¶¶ 25-27 (December 18, 2014) (Wireless Telecommunications Bureau).
[123] Robert Krol, "Tolling the Freeway: Congestion Pricing and the Economics of Managing Traffic." Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, May 5, 2016, available at

from the highway, while commuters willing to pay for a faster trip have that option. Virginia has used the optional toll system to attract private investment for highway construction, and recently announced that it had attracted new private investment to expand the optional toll network to another stretch of highway I-395.[124] Even the drivers who do not pay the toll benefit from the private investment and expansion of the highway, which reduces congestion in the non-toll lanes while giving them the option to use the faster toll lanes when they wish to use them.

Similarly, sports stadiums have luxury boxes and favorable seating available for higher prices, but that does not mean the stadium operators want to exclude other customers who are unwilling to pay for premium seating or amenities, or build smaller stadiums to restrict the supply of seats in order to drive up prices. Having some customers pay extra for better seats generates revenue that may be invested to upgrade the stadium, to offer extra amenities that may be available to all customers, or to attract free agent professional players to make their teams more competitive, all of which may make seeing the games more enjoyable for all fans, even the ones paying the least.

Airlines charge passengers extra for a variety of different enhanced services, including first class seats, priority boarding, seats with extra leg room, and seats near the front of the airplane. The airlines' goal is not to exclude passengers who do not pay for these services or force them to pay higher fares. In fact, the opposite is much more likely. The customers who do not pay extra for better service are unlikely to be made worse off by having other customers on the plane who choose to pay extra for better service. Instead, it is more likely that customers who pay less are better off if the airline chooses to offer more flights over more routes to attract

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https://www.mercatus.org/publication/tolling-freeway-congestion-pricing-and-economics-managing-traffic.

[124] Terry McAuliffe, "Governor McAuliffe Announces Acceptance of Private Sector Proposal to Deliver I-395 Express Lanes Extension, News Release, February 25, 2017, available at https://governor.virginia.gov/newsroom/newsarticle?articleId=19616.

customers willing to pay extra, and then offers lower fares to fill the remaining seats on those flights.

Some specialized services for dedicated users require a high level of end-to-end reliability. The benefits from video phone calls and video streams, for example, are reduced when data traffic congestion causes transmission delays. Paid prioritization agreements that provide Quality-of-Service guarantees could enhance the attractiveness and value of these services. Indeed, innovative edge providers have expressed willingness to pay broadband ISPs for some form of premium access, such as ensured faster delivery, in order to deliver a satisfactory consumer experience.

Consumers stand to benefit from novel services providing Quality-of-Service guarantees that depend upon paid priority arrangements between broadband ISPs and edge providers. New entrants in the online services market that seek to compete against the likes of a Netflix or a Google may seek to negotiate paid prioritization agreements with broadband ISPs in order to enhance their competitiveness in the market. Many future web applications are unlikely to develop if their developers cannot be assured that they will have access to fast and stable Internet connections. Autonomous vehicles, interactive e-learning, and telemedicine are examples of applications in their early stages of development. Investors may be unwilling to take the risk of investing in these applications if they cannot be assured of reliable prioritized broadband connections. The *Title II Order*'s absolute ban on paid prioritization agreements, if left in place, may well prevent these and other future services from developing at all.

Also, as emergency services evolve, governments may want to have paid prioritization available as an option for Amber alerts, severe weather alerts, Homeland Security warnings and other highly time-sensitive functions. Prioritized access could help optimize public transportation

and traffic management, ensure fast and reliable communication among law enforcement officers and first responders, and ensure immediate and quality access to telemedicine. For example, in a webinar held on July 12, 2017, Todd Early, deputy assistant director of the Public Safety Communications Service within the Law Enforcement Support Division of the Texas Department of Public Safety, reportedly "emphasized the benefit of AT&T, Inc., providing priority access immediately and preemption by the end of this year across its LTE network for public safety agencies in states that opt in to having the carrier build their First Responder Network Authority (FirstNet) radio access networks (RANs)."[125]

Other Internet uses do not typically require or benefit from a prioritized Internet connection. Email traffic, most file downloading, and many other uses lose little or none of their value if their transmission is not prioritized. Further, lower-income consumers may prefer to forego faster or otherwise premium services in exchange for the opportunity to choose more affordable services that are enabled by paid priority agreements.

Unfortunately, the *Title II Order* wrongly constrains broadband ISPs' freedom to charge edge providers based on their relative usage of ISP network facilities. The *Title II Order* concluded that its ban on paid prioritization would lead to more broadband investment because of its so-called the "virtuous cycle" theory.[126] According to the order, broadband ISPs have the incentive to divide the Internet into "fast lanes" for those who pay tolls for fast access and "slow lanes" for those that don't. Supposedly, by restricting the point of connection between end users and edge providers, broadband ISPs could reduce investments in network capacity and maximize profits by extracting payments from edge providers competing for their limited capacity. The order's ban on paid prioritization agreements is proffered as a way of removing or reducing

[125] Paul Kirby, "State Official Hails Benefit of AT&T Providing Priority Access, Preemption On LTE Network," *TRDaily* (July 12, 2017), available at: http://www.trdailyonline.com/online/trd/2017/td071217/index.htm.
[126] *Title II Order*, at ¶ 18.

broadband ISP incentive to "choke" consumer demand for its product, and instead encouraging more investment in network infrastructure.

However, the *Title II Order* offered no evidence that these conjectured harms were occurring. The order did not make a finding that broadband ISPs had market power. Therefore, the order failed to provide factual support for a necessary condition for its virtuous cycle theory for imposing public utility regulation on broadband ISPs. The ability of broadband ISPs' to experiment with new business models or service variations to meet changing consumer demands should not be restricted. And innovation is impeded by restrictions that discourage broadband ISPs from differentiating their services. Broadband ISPs should therefore have the freedom – which other participants in a competitive marketplace possess – to experiment with various pricing models that reflect relative cost and value considerations.

Additionally, Professor Tim Brennan has described the *Title II Order*'s economics supporting a total ban on paid prioritization agreements as "irrelevant":

> In arguing against "paid prioritization," the FCC cited articles on what economists call "price discrimination" to suggest possible harms when a broadband provider charges different prices to content providers that compete with each other. But paid prioritization isn't price discrimination; it's charging higher prices for better service. These price discrimination articles are relevant only if there is no cost to providing better service, such as guaranteed speeds or minimal transmission gaps. The only way this can be done at no cost is that the existing capacity can provide the best service anyone would ever want at any time – that is, that capacity can never be congested. While counterintuitive, especially for wireless, some nonetheless believe this premise.[127]

Considering the potential benefits to consumers and increases in capital investment that are likely to result from paid prioritization agreements as well as the failure to demonstrate the existence of the conjectured harms that formed the basis of the virtuous cycle theory, the *Title II Order*'s ban is unjustified and should be eliminated. Any concerns that paid prioritization

[127] Brennan, "Is the Open Internet Order an 'Economics-Free Zone'?" at 2.

agreements could produce anticompetitive effects should be addressed through less intrusive means. Such means include antitrust enforcement by the DOJ or FTC as well as consumer protection enforcement by the FTC to address unfair or deceptive trade practices related to minimum quality standards.

If the Commission decides to adopt some form of regulatory oversight over broadband Internet access services using its ancillary authority, paid prioritization or other two-sided market transactions should be subject to the commercially reasonable standard described earlier in this Section. Under such a standard, the Commission should presume that paid prioritization or other two-sided transactions involving broadband ISPs and edge providers benefit consumers. Accordingly, the burden of producing evidence of market power or consumer harm should rest on complaining parties challenging such transactions. This approach would likely ensure that broadband ISPs retain sufficient flexibility to engage in marketplace dealings that could further innovation and investment in new services, thereby offering consumers new sources of value.

E. The General Conduct Standard is Vague and Should Be Eliminated

Through its *Title II Order*, the Commission established a vague and open-ended "general conduct" standard or "no-unreasonable interference/disadvantage" rule for addressing alleged anticompetitive concerns in the broadband Internet access services market. According to the *Title II Order,* the standard is to be applied on a case-by-case basis, considering the "totality of the circumstances."[128] To guide its analysis, the Commission adopted a "non-exhaustive list of factors" to consider, and to which the Commission will attach different relative weight, however

[128] *Title II Order*, at ¶ 138.

it deems fit.[129] This "general conduct" standard lacks that necessary clarity to adequately inform broadband ISPs of what they can and cannot do.[130]

In addition to being problematically vague, the general conduct standard is subject to pro-regulatory bias in its enforcement procedures. The *Title II Order* requires that upon a complaining party showing a *prima facie* violation of the standard, the broadband ISP bears the burden of rebutting it by affirmatively showing they are in compliance with the Commission's vague standard.[131] Further, under the *Title II Order*, the Commission retains discretion to place the burden of production onto broadband ISPs when it sees fit to do so.[132]

The Commission, tellingly, calls the conduct standard a "catch-all" provision right in its *Title II Order*.[133] Thus, the Commission empowered itself to ban or restrict broadband ISP practices based on little more than a mere predilection instead of a clear showing of harm according to ascertainable principles.

The regulatory uncertainty posed by this standard and enforcement process discourages innovation in network practices, undermines investment in those networks, and as a result, harms consumers by reducing choices in the market. The Commission should eliminate the general conduct standard.

F. The FCC Should Not Impose New Regulations on Mobile Broadband Internet Access Services Even if it Possesses Ancillary Authority Over Those Services

In order to alleviate these harms and to re-establish an environment hospitable to innovation and investment in the wireless ecosystem, the Commission should restore Title I

[129] *See id*., at ¶¶ 138-145.
[130] For a more detailed critique, *see* Seth L. Cooper, "FCC's Vague 'General Conduct' Standard Deserves Closer Legal Scrutiny," *Perspectives from FSF Scholars*, Vol. 11, No. 23 (July 6, 2016): http://www.freestatefoundation.org/images/FCC_s_Vague_General_Conduct_Standard_Deserves_Closer_Legal_Scrutiny_070616.pdf.
[131] *Id*., at ¶ 252.
[132] *Id*., at ¶ 252.
[133] *Id*., at ¶ 21.

classification for mobile broadband services. Further, the Commission should refrain from imposing any new regulations on mobile broadband Internet access services – even if the Commission determines it maintains ancillary authority over those services.

The Commission's *Wireless Broadband Order* (2007) declared mobile broadband Internet access service to be a Title I "information service," in significant part, to provide regulatory certainty to spur financial investment, technological innovation, and infrastructure deployment.[134] Also, wireless operating systems, content, applications and other data services such as text messaging are not directly subject to either Title I or Title II. Most of those services are likely beyond the Commission's jurisdiction.

Until the *Title II Order*, the most innovative and in-demand components of that ecosystem have never been subject to regulatory restraints. But the *Title II Order*'s nondiscrimination and other mandates, as well as the regulatory uncertainty posed by the general conduct standard, has harmed investment – as described in Section IV. The Commission's year-long investigation into "free data" mobile plans, which offer consumers access to popular websites or applications without incurring data charges,[135] epitomized the vagueness of the general conduct standard as well as the anti-innovation and anti-consumer regulatory bent of the *Title II Order*. Offerings like free data plans ought to be encouraged and only a misconceived policy would treat such offerings as suspect without evidence of consumer harm.

Regulatory mandates on mobile broadband ISP practices are particularly unwarranted in light of the mobile broadband market's innovative and competition conditions. The mobile

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[134] FCC, *Appropriate Treatment for Broadband Access to the Internet Over Wireless Networks*, WT Docket No. 07-53, Declaratory Ruling ("*Wireless Broadband Order*")(2007), at ¶ 22.

[135] *See* FCC (Wireless Telecommunications Bureau) "Wireless Telecommunications Bureau Report: Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-Rated Content and Services" (released January 11, 2017); FCC (Wireless Telecommunications Bureau), Wireless Telecommunications Bureau Report: Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-Rated Content and Services, Order (released February 3, 2017) (rescinding January report).

broadband market benefited tremendously from the certainty provided by light-touch regulatory treatment under Title I. The creation and deployment of new mobile technologies, services, and products – including the successive network generation upgrades, increasing speeds, new operating systems, new applications, and unique content for mobile platform – proceeded in the absence of public utility regulation.

Further, mobile broadband ISPs are undoubtedly non-dominant in terms of today's broadband marketplace. As indicated previously, as of December 2015, 95.9% of the population is served by three or 4G LTE mobile broadband ISPs, and 89.1% by four or more.[136] Moreover, the *Title II Order* offered no evidence of market power in the mobile broadband Internet access services market. Nor did the *Title II Order* find any specific threat of harm to consumers of those services. Also, the Commission's report observations about the ready availability to consumers of ETF buyout contracts – which facilitate consumer migration to new mobile broadband ISPs – undermines the *Title II Order*'s flawed gatekeeper/switching costs rationale for imposing public utility regulation on mobile broadband Internet access services.

Technical constraints faced by mobile broadband Internet access providers in meeting high-speed, high data traffic demands by consumers also warrant the Commission's refrain from imposing new regulatory mandates on mobile broadband ISPs. The *Open Internet Order* (2010) observed that mobile broadband networks face "operational constraints that fixed broadband networks do not typically encounter,"[137] and that observation remains true today. On several occasions, the Commission has observed that spectrum availability poses a significant infrastructure barrier to mobile network deployment.[138] The propagation characteristics of

[136] *Nineteenth Report*, at 30-31 ¶ 39 (internal cite omitted).
[137] 2010 *Open Internet Order*, at ¶ 95.
[138] *See, e.g.*, FCC, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial

spectrum bands vary, creating unique network engineering challenges, compounded by topographical and geographic conditions, as well as consumer population and demands on usage. Additional technical challenges to offering mobile broadband Internet access service, including next-generation network transitions and upgrades and the integration of end-user devices with unique functional capabilities and constraints.

Moreover, mobile broadband ISPs must tackle new dimensions of these technical challenges amidst surging data traffic demands and the deployment of 5G networks. According to the "Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2016–2021": "Global mobile data traffic will increase sevenfold between 2016 and 2021."[139] The Cisco Index forecasts mobile data traffic growth "at a compound annual growth rate (CAGR) of 47 percent from 2016 to 2021, reaching 49.0 exabytes per month by 2021."[140] In the United States, mobile data traffic will increase fivefold over the same time period, from 1.3 exabytes per month to 6.1 exabytes per month. Mobile traffic is forecast to grow two times faster than fixed traffic in the U.S. from 2016 to 2021. Spurred by skyrocketing mobile consumption of HD video content and virtual reality gaming, and enabled by cloud technology, 5G network capabilities, smartphones, and tablets, the accommodation of such exponential wireless data traffic requires not only sufficient spectrum but the removal of regulatory impediments that discourage investment.[141]

Given these dynamic market conditions and absent evidence of anticompetitive conduct, and also in light of the unique technical constraints that wireless spectrum poses for mobile

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Mobile Services, *Sixteenth Report*, WT Docket No. 11-186 (March 21, 2013), at 209, ¶ 328. Other Reports contain similar observations.

[139] Cisco, Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2016–2021" (March 28, 2017), available at: http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/mobile-white-paper-c11-520862.html (Executive Summary).

[140] *Id.*

[141] *Id.*

broadband ISPs, the Commission should restore marketplace freedom for the wireless ecosystem by reclassifying mobile broadband Internet access service as a Title I information service. At the same time, the Commission emphatically should refrain from imposing new regulatory mandates on this vibrant service. However, to the extent the Commission decides to impose new regulation on mobile broadband Internet access, such regulation should consist of the commercially reasonable standard outlined earlier in this Section. In that case, the Commission's regulatory policy should operate on the presumption that mobile broadband ISP practices are reasonable absent clear and convincing evidence of market power and consumer harm.

VIII. THE FCC LACKS AUTHORITY TO REGULATE BROADBAND INTERNET NETWORK INTERCONNECTION

The *Title II Order*'s assertion of regulatory authority over network interconnection exceeded the Commission's jurisdictional authority.[142] As the Notice recognizes, network interconnection agreements have historically been unregulated and beyond the Commission's reach.[143] Such agreements are the subject of private negotiations in a free market setting. The *Title II Ord*er's redefinition of broadband Internet access service to "involve[] the exchange of traffic between a last-mile broadband provider and connecting networks" was unreasonable.[144]

The last mile connection between the provider of cable modem service and the retail end user provided contextual backdrop for the Supreme Court's decision in *Brand X* and the *Cable Modem Order*. That provider-to-end-user last mile context underpinned of the definitions of information and telecommunications services analyzed by those authorities. The *Title II Ord*er exceeded the scope of *Brand X* and agency precedents by purporting to bring within its

[142] *See Title II Order*, at ¶¶ 202-206.
[143] Notice, at ¶ 42.
[144] *Title II Order*, at ¶ 204.

jurisdiction this different "last mile" that runs far deep into the Internet into its jurisdictional grasp.

Having exceeded the scope of *Brand X*, there is no reason to presume that the Commission's redefining of broadband Internet access service to include network interconnection involved agency interpretation of ambiguous statutory terms – and thereby no reason to presume it would receive *Chevron* deference. Rather, the Commission's extension of its Title II authority to network interconnection is an aspect of the major question of economic and political significance in subjecting broadband Internet access service to public utility regulation. A clear statement of agency authority by Congress should be required. But because such a clear statement is lacking, the Commission lacked legal authority for assuming regulatory oversight over network interconnection.

IX. THE FCC SHOULD CONDUCT A COST-BENEFIT ANALYSIS OF ITS TITLE II ANALYSIS REGULATIONS AND ANY PROSPECTIVE NEW REGULATIONS CONSIDERED FOR ADOPTION IN THIS PROCEEDING

The Commission is to be commended for its Notice proposal to conduct an analysis that compares the costs and the benefits of maintaining its Title II reclassification of broadband Internet access service as a telecommunications service and the public utility regulation it adopted in the *Title II Order*.[145] As explained in Section IV, the *Title II Order* has resulted in foregone investment due to regulatory costs and uncertainty. Also, as described in that section, the Commission's rationale for imposing its public utility regulation rested on a flawed theoretical basis, particularly given the lack of any market power or consumer findings in the *Title II Order*. Indeed, there is no evidence that consumers have received any direct benefit from

[145] *Id*. at ¶¶ 105-14.

the Title II reclassification or the Commission's public utility regulation of broadband Internet access service.

As further detailed in "An Assessment of the FCC's Proposal to Conduct a Cost-Benefit Analysis,"[146] a scholarly paper by Free State Foundation Senior Fellow Dr. Theodore R. Bolema that accompanies this public comment as Attachment A, the benefits of eliminating the Commission's public utility regulatory regime outweighs the costs. The paper that comprises the Attachment reviews the Notice's cost-benefit analysis proposal. It examines key principles as that should guide that analysis and identifies key factors that should specifically be included. The paper's intent is to help the Commission establish a strong agency precedent for cost-benefit analyses of future proposed rules.

X. CONGRESS SHOULD ADOPT NEW LEGISLATION IF THE FCC CONCLUDES THAT IT NEEDS TO HAVE AUTHORITY OVER BROADBAND

After more than a decade of back-and-forth fighting and litigating "net neutrality" at the Commission and in the courts, it would be most appropriate for Congress to enact a law regarding the regulatory status of broadband ISPs and permissible or prohibited practices. In our view, the authority of the FCC (or the FTC or any other entity) should be narrowly-circumscribed and should require clear and convincing evidence of market failure and consumer harm before the imposition of any sanctions in a case-by-case adjudication. In light of the rapidly evolving, dynamic nature of the Internet, and the competitive market that exists among broadband ISPs, any such "net neutrality" law should avoid absolute bans on ISPs practices, even ones on which there may be seeming consensus now. The law should instead favor a

[146] The Attachment is separately published online. *See* Theodore R. Bolema, "An Assessment of the FCC's Proposal to Conduct a Cost-Benefit Analysis," *Perspectives from FSF Scholars*, Vol. 12 No. 23 (July 14, 2017), available at: http://www.freestatefoundation.org/images/An_Assessment_of_the_FCC_s_Proposal_to_Conduct_a_Cost-Benefit_Analysis_071417.pdf.

standard requiring a convincing showing of market power and consumer harm. In other words, Congress should not adopt rules that, inevitably, will have the effect of deterring investment and innovation by virtue of being overly rigid or prescriptive. The legislative framework should be based on case-by-case adjudications upon filed complaints and involve application of a presumption of commercial reasonableness that is rebuttable by clear and convincing evidence of market power and consumer harm – all of which are components of the commercially reasonable standard articulated in Section VI. There are different ways such legislation might be drafted consistent with those core principles. In any event, passage of a legislative framework establishing Commission authority over broadband ISP practices according to a circumscribed commercially reasonable standard would provide considerable predictability for broadband Internet service providers. A significant degree of predictability and certainty in the legal regime are critical to promoting innovation and investment and also essential to maintaining the rule of law.

XI. CONCLUSION

For the foregoing reasons, the Commission should act in accordance with the views expressed herein. The Commission must undo the harm to innovation and investment caused by the *Title II Order* and remedy the legal defects of the current regulatory regime by repealing its Title II classification and public utility regulation of broadband Internet access services. The Commission must reclassify broadband services as Title I information services so, at most, they will be subject to light touch regulation. This would restore Internet freedom and redirect the Commission's future policy efforts toward encouraging new investment and more rapid deployment of broadband services to all Americans.

Following repeal of its *Title II Order*, and determination that Section 706 is not an independent source of regulatory authority, if the Commission concludes that it needs to exercise some oversight over broadband Internet access services, it should adopt a circumscribed commercially reasonable standard that should be applied on case-by-case basis, operating under a rebuttable presumption, absent clear and convincing evidence of market power and consumer harm, that broadband ISPs' practices are reasonable. And, in any event, Congress should pass a new, circumscribed market-oriented legislative framework fit for the innovative and competitive broadband market of the 21st Century.

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An Assessment of the FCC's Proposal to Conduct a Cost-Benefit Analysis

by

Theodore R. Bolema *

I. Introduction and Summary

In its May 18, 2017, *Restoring Internet Freedom* Notice of Proposed Rulemaking ("NPRM"), the Federal Communications Commission proposed conducting a cost-benefit analysis of its proposed rule.[147] This is a welcome development by the FCC. As this paper explains in considerable detail, the benefits of eliminating the Title II public utility-like regulatory regime adopted by the Commission in 2015 outweigh the costs. Of course, not all of the benefits are easily quantifiable with exactitude. But it is increasingly clear that leaving the 2015 *Open Internet Order*[148] in place results in substantial foregone investment. Indeed, by one Free State Foundation estimate, since 2015 there has been $5.6 billion in lost investment.[149]

Importantly, the FCC further proposes as part of the *Restoring Internet Freedom* NPRM to use a multiplier approach to connect the lost investment effects from the *Open Internet Order* to the total economic costs of the 2015 regulation. The investment multiplier approach is used to

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[147] Federal Communications Commission, "Protecting and Promoting the Open Internet Notice of Proposed Rulemaking," WC Docket No. 17-108; FCC 17-60 at ¶¶ 105-14, adopted May 18, 2017, available at https://www.fcc.gov/document/restoring-internet-freedom-notice-proposed-rulemaking.

[148] Federal Communications Commission, FCC-15-24, In Re Protecting and Promoting the Open Internet (hereinafter *Open Internet Order*), March 12, 2015 at ¶ 20 (footnotes omitted).

[149] Michael J. Horney, "Broadband Investment Slowed by $5.6 Billion Since Open Internet Order" Free State Foundation Blog (May 5, 2017), available at http://freestatefoundation.blogspot.com/2017/05/broadband-investment-slowed-by-56.html.

estimate the additional effects of a policy that are not immediately measurable. An investment multiplier tries to measure the total economic impact of a project, so, for example, it includes the incomes of construction workers, the profits for material suppliers, and other related costs of the project. Existing research suggests that private broadband infrastructure investment should have a significant positive impact on the economy as a whole.

A multiplier above 1.0, and perhaps in the range of 1.25 to 1.75, is likely to be a reasonable and conservative estimate based on current research. Applying this multiplier to the Free State Foundation estimate of a $5.6 billion reduction in broadband investment over 2015 and 2016 produces an estimate of $7.0 to $9.8 billion in lost economic activity attributable to the *Open Internet Order*, with a midrange estimated economic impact of negative $8.4 billion. If the current investment trend were to continue, the negative economic impact resulting from the *Open Internet Order* regulatory regime will only become greater over time.

This *Perspectives* reviews the FCC's proposal for conducting this cost-benefit analysis as part of its review of the proposed *Restoring Internet Freedom* rules. It discusses the key principles that should guide the FCC's cost-benefit analysis in order to help the agency establish the strongest possible process as precedent for cost-benefit analyses of future proposed rules. This *Perspectives* also identifies the key factors that should be considered as part of the specific analysis for the NPRM, following the organization used by the FCC in paragraphs 105 to 114 of the *Restoring Internet Freedom* NPRM.

Regulatory agencies that are part of the executive branch have been required to conduct cost-benefit analyses for decades to help them understand the consequences of the regulatory actions they are considering. As an independent agency, the FCC is currently not required to conduct a cost-benefit analysis as part of its rulemaking process. Other independent agencies, however, including the Federal Trade Commission and the Securities and Exchange Commission, have instituted their own internal requirements for conducting some form of cost-benefit analysis. The FCC should follow their example.

Cost-benefit analysis methods used by other agencies are strongly supported by economists who have served in both Democratic and Republican administrations and would help the FCC evaluate the numerous comments it receives when considering regulatory proposals. By following the well-established practices of other regulatory agencies, the FCC can take an important step in avoiding becoming known as an "economic-free zone."[150]

The FCC should be commended for seeking to better integrate economic analysis into its decisionmaking. In addition to proposing to conduct this cost-benefit analysis, Chairman Ajit Pai recently announced that the FCC is creating an Office of Economics and Data with the directive of "providing economic analysis for rulemakings, transactions, and auctions; managing the Commission's data resources; and conducting longer-term research on ways to improve the Commission's policies."[151] Only if agency regulations are based on sound economic analysis can

[150] See Tim Brennan, "Is the Open Internet Order an "Economics-Free Zone?" Free State Foundation, June 28, 2016, available at http://www.freestatefoundation.org/images/Is_the_Open_Internet_Order_an_Economics_Free_Zone_062816.pdf

[151] Ajit Pai, "Remarks of Federal Communications Commission Chairman Ajit Pai at the Hudson Institute: The Importance of Economic Analysis at the FCC," (speech, Washington, DC, April 5, 2017), available at

decision-makers have a clear understanding of whether the benefits of their regulatory actions outweigh the costs. Cost-benefit analysis also allows regulators to better understand the consequences of various policy proposals.

President Clinton's Executive Order 12866, which has been followed by every administration since 1993, requires that executive branch agencies conduct cost-benefit analyses for all "economically significant" regulations, or regulations having an annual economic effect of at least $100 million on the economy.[152] The FCC proposes that it be guided by Section E of OMB Circular A-4 in its cost-benefit analysis, which is the guidance used by executive branch agencies in three administrations dating back to 2003. The FCC should only deviate from these standards if it has very compelling reasons for doing so. Most likely the standards from OMB Circular A-4 will be entirely appropriate for all issues the FCC must consider in this cost-benefit analysis.

The FCC proposes to start its cost-benefit analysis by defining the baseline, or multiple baselines, against which the proposed regulation should be compared. Such a comparison is necessary so that the impact of the regulation can be measured as the change from the baseline to the regulated scenario. In effect, the FCC is proposing to conduct a cost-benefit analysis of the 2015 *Open Internet Order*, as implemented. This approach has the advantage of being able to draw upon the experience and data from the regulation in place before 2015. This baseline can also be used for separate cost-benefit analyses if it is assumed that different components of the 2015 *Open Internet Order* are retained, including maintaining the Internet conduct rule, the no-blocking rule, the no-throttling rule, the ban on paid prioritization, and the transparency rule.

One of the challenges in cost-benefit analysis is accounting for uncertainty. Other federal agencies, however, including the Environmental Protection Agency and the SEC, have been able to address uncertainty successfully in their cost-benefit analyses. The FCC could request guidance from the Office of Information and Regulatory Affairs, which reviews the economic analyses of executive agencies that deal with uncertainty.

The FCC should keep in mind that the most challenging uncertainty issues it must address in its cost-benefit analysis will be on the side of the current *Open Internet Order* regulation. The FCC has a good idea of what the pre-2015 baseline is like, based on years of experience with regulation that was much more "light touch" than the public utility regulation adopted in 2015. In contrast, the FCC majority's justifications for the *Open Internet Order* were largely based on speculative harms that have not occurred. And it is difficult to anticipate whether any of the harms predicted by the 2015 FCC majority ever would have occurred.

In any event, considerable evidence already is emerging that the *Open Internet Order* is having a depressing effect on broadband capital investment. In a recent address, FCC Chairman Pai cited Free State Foundation research by Research Associate Michael Horney estimating that the 2015 *Open Internet Order* "has already cost our country $5.1 billion in broadband capital

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https://apps.fcc.gov/edocs_public/attachmatch/DOC-344248A1.pdf. As discussed below, Horney revised his estimate to $5.6 billion in lost investment using the same methodology after additional data became available.

[152] Executive Order no. 12,866, Federal Register 58, no. 190 (October 3, 1993).

investment."[153] Other scholars have estimated declines in broadband investment that are similar or greater, depending on the methodology and baselines they used. These reports, as well as the data sources they reply upon, should provide a strong basis for estimating the investment impact of the *Open Internet Order* relative to the baseline. While some studies have found that broadband capital investment increased since 2015, they do so by mischaracterizing large non-broadband investments. When those non-broadband investments are removed, the most prominent study claiming to show an increase in broadband investment actually shows the opposite.

The FCC also is interested in how the *Open Internet Order* may be affecting local governments. The costs in these areas are potentially very high and should be considered in the cost-benefits analysis. Evidence is emerging that FCC regulatory policies during the Obama administration, including the 2015 net neutrality mandates, had a large negative effect on employment. Local governments are also affected, as they consider risky municipal broadband projects in areas that are not well served by depressed private broadband investment.

Federal, state, and local governmental units in the future may want Amber alerts, severe weather alerts, and Homeland Security warnings given priority over other Internet traffic. As emergency services evolve, governments may want to have some form of prioritization available as an option for these and other highly time-sensitive functions. The FCC should include some costs in its analysis reflecting how enhancement in these types of government functions may be delayed by the restrictions in the *Open Internet Order*.

Perhaps the most significant cost imposed by the *Open Internet Order* is the way the ban on paid prioritization is impeding the development of new business models or new product and services that would otherwise deliver value to society. Some specialized services for dedicated users require a high level of end-to-end reliability, which may not be available under the current ban on paid prioritization. Autonomous vehicles, interactive elearning, and telemedicine are examples of applications in their early stages of development that require access to fast and stable Internet connections. Investors may be unwilling to take the risk of investing in these applications if they cannot be assured of reliable prioritized broadband connections. The economic benefits from these new services are very large, and must be considered in any cost-benefit analysis.

Moreover, the rigid ban on paid prioritization ignores the benefits that are typically achieved in other markets from allowing vertical arrangements to develop as suppliers, distributors, and customers experiment in the market to find the arrangements that provide the greatest benefits.[154] So long as markets are reasonably competitive, or are moving toward becoming competitive,

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[153] Ajit Pai, "Remarks of Federal Communications Commission Chairman Ajit Pai at the Newseum: The Future of Internet Freedom," (speech, Washington, DC, April 26, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0426/DOC-344590A1.pdf.

[154] See Theodore Bolema, "Allow Paid Prioritization on the Internet for More, Not Less, Capital Investment," Free State Foundation (May 1, 2017), available at http://www.freestatefoundation.org/images/Allow_Paid_Prioritization_on_the_Internet_for_More,_Not_Less,_Capital_Investment_050117.pdf.

arrangements that try to take advantage of other parties will not survive for long, because the parties at a disadvantage can find alternative arrangements.

Significantly, the *Open Internet Order* regulations can only pass a cost-benefit test if they are addressing a clear market failure than can only be resolved by the FCC regulation. If there is no market failure or other systemic problem, then government action will likely do more harm than good. The FCC justified the 2015 *Open Internet Order* in large part on conjectured harms that might occur in the future, but had not occurred to date under regulatory oversight that was considerably less heavy-handed. Then-Commissioner Pai pointed out the lack of evidence of anticompetitive harm in his 2015 dissent to the *Open Internet Order*.[155]

Unless the FCC can identify more systematic evidence of harm from market failures that could only be corrected by FCC mandates, it is difficult, if not impossible, to see how the FCC can conclude that the *Open Internet Order* regulation achieves any net benefits relative to the baseline. Thus, even any seemingly benign provisions in the *Open Internet Order*, like the bans on blocking and throttling that may not attract any strong objections from Internet service providers, will at best achieve no net benefits that are outweighed by the compliance costs.

Given the remarkable record of innovation, investment, and choice of new services offered to customers before the *Open Internet Order* regulation was imposed, it is highly unlikely that any such market failure can be found. If the FCC does identify a market failure, perhaps based on market power for some parties in some places at some times, then it must also consider whether less intrusive alternative approaches are sufficient to address the market failure before resorting to public utility regulation of a broadband market segment. These alternative approaches include increased antitrust enforcement, new consumer protection regulations, or minimum quality standards.

II. The Importance of Cost-Benefit Analysis by Regulatory Agencies

The FCC's reasoning for seeking a cost-benefit analysis is stated in paragraph 105 of the *Restoring Internet Freedom* NPRM:

> We propose as part of this proceeding to conduct a cost-benefit analysis (CBA). We propose to compare the costs and the benefits of maintaining the classification of broadband Internet access service as a telecommunications service (i.e. Title II regulation); maintaining the Internet conduct rule; maintaining the no-blocking rule; maintaining the no-throttling rule; maintaining the ban on paid prioritization; maintaining the transparency rules; and acting on the other interpretive and policy changes for which we seek comment above. We seek comment on how the CBA should be conducted to appropriately separate or combine the analyses of each piece discussed above. We also seek comment generally on the importance of conducting a CBA as well as the interaction between the Commission's public interest standard and a weighing of the costs and benefits. (footnote omitted.)

[155] Dissenting Statement of Commissioner Ajit Pai, *Open Internet Order*.

The cost of federal regulations in the United States is very high. A recent comprehensive study of the economic burden of U.S. regulation found that if federal regulations had been held constant at levels observed in 1980, the U.S. economy would have been about 25 percent larger than it was in 2012. The difference is approximately $4 trillion in lost economic activity, or approximately $13,000 per person.[156]

Economic regulations that are properly designed and narrowly tailored to address a specific market failure can serve a public interest purpose. Economic analysis shows that properly tailored regulation can help establish property rights, address spillover effects that may harm other parties, and create standards that producers can find useful. But regulation can also protect entrenched interests from competition, discourage innovation, and cause more harm than good as it losses its effectiveness by becoming outdated. As Supreme Court Justice Stephen Breyer noted, "well-meaning, intelligent regulators, trying to carry out their regulatory tasks sensibly, can nonetheless bring about counterproductive results."[157] Cost-benefit analysis, if properly formulated and executed, can be used to identify opportunities for reducing this regulatory burden without decreasing the net benefits from regulations.

Requiring regulators to conduct cost-benefit analyses has a long history of bipartisan support. Every President since Jimmy Carter has required executive branch regulatory agencies to conduct cost-benefit analyses of certain proposed regulations. President Carter also signed the legislation that created the Office of Information and Regulatory Affairs (OIRA) which is part of the Office of Management and Budget. OIRA oversees the regulatory analysis by executive branch agencies and can delay regulations if it finds those analyses inadequate. Cass Sunstein, appointed at the beginning of the Obama administration to head OIRA, strongly advocated for review of federal regulations using cost-benefit analysis, which was reflected in a series of executive orders by President Obama eliminating regulations OIRA found to be inefficient.[158] Moreover, President Obama's Executive Order 13579 encourages independent agencies to conduct retrospective review of their existing regulations.[159]

President Clinton's Executive Order 12866, which has been followed by every administration since 1993, requires that executive branch agencies conduct cost-benefit analyses for all "economically significant" regulations. Economically significant regulations are defined as those having an annual economic effect of at least $100 million on the economy.[160] This executive order "expresses the philosophy that regulations should (1) address a 'compelling public need, such as material failures of private markets'; (2) be based on an assessment of 'all costs and

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[156] Bentley Coffey, Patrick A. McLaughlin, and Pietro Peretto. "The Cumulative Cost of Regulations." Mercatus Working Paper, Mercatus Center at George Mason University (April 2016), at 7, available at https://www.mercatus.org/system/files/Coffey-Cumulative-Cost-Regs-v3.pdf. These authors survey other scholarly research that also found large costs due to regulatory accumulation.

[157] Stephen Breyer, Breaking the Vicious Circle: Toward Effective Risk Regulation, Harvard University Press (1995), as quoted in Susan E. Dudley and Jerry Brito, *Regulation: A Primer,* 2nd ed., Mercatus Center at George Mason University and George Washington University Regulatory Studies Center (2012), at 61.

[158] Michael B. Rappaport, "Using Delegation to Promote Deregulation," *Regulation*, Winter, 2015-2016, at 26-30, available at https://object.cato.org/sites/cato.org/files/serials/files/regulation/2015/12/regulation-v38n4-5.pdf.

[159] Executive Order no. 13,579, Federal Register 76, no. 14 (January 21, 2011).

[160] Executive Order no. 12,866, Federal Register 58, no. 190 (October 3, 1993).

benefits of available regulatory alternatives, including the alternative of not regulating'; and (3) 'maximize net benefits' to society unless otherwise constrained by law."[161]

While the *Restoring Internet Freedom* NPRM proposal would be considered economically significant by this definition,[162] it is not subject to Executive Order 12866, which has not been extended to independent federal regulatory agencies like the FCC.[163] Independent agencies are not required to perform regulatory analysis or submit regulations to OMB for review, but many of them, including the FTC and SEC, have adopted their own internal requirements that are similar to the requirements for executive branch agencies.

The FCC should be commended for seeking to better integrate economic analysis into its decisionmaking. In addition to proposing to conduct this cost-benefit analysis, Chairman Pai recently announced that the FCC is creating an Office of Economics and Data with the directive of "providing economic analysis for rulemakings, transactions, and auctions; managing the Commission's data resources; and conducting longer-term research on ways to improve the Commission's policies."[164] Only if agency regulations are based on sound economic analysis can decision-makers have a clear understanding of whether the benefits of their regulatory actions outweigh the costs. Cost-benefit analysis also allows regulators to better understand what is likely to happen as a result of various policy proposals.

The FCC's public interest standard is very broad, even indeterminate. Such a broad standard can be interpreted in many ways, but it certainly doesn't preclude cost-benefit analysis. Indeed, in today's increasingly competitive, technologically dynamic communications marketplace environment, it is more likely than not that reasoned decisionmaking requires the analytical discipline that proper cost-benefit analysis calls forth to inform any decisions purporting to rest on the agency's public interest authority.

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[161] Susan E. Dudley and Jerry Brito. *Regulation: A Primer*, 2nd ed., Mercatus Center at George Mason University and George Washington University Regulatory Studies Center (2012), at 41.

[162] U.S. e-commerce retail sales alone in 2016 were approximately $390 billion in 2016. U.S. Census Bureau, "Quarterly E-commerce Retail Sales," May 16, 2017, available at file:///F:/Free%20State%20Foundation/CBA%20research/DOC.retail%20ecommerce%20sales%202016.pdf. Moreover, several studies discussed below show that the impact of the 2015 *Open Internet Order* on capital investment has far exceeded this threshold.

[163] Former White House Counsel C. Boyden Gray argues that the President has to power to extend the same requirements for regulatory review to independent agencies like the FCC. C. Boyden Gray, "The President's Constitutional Power to Order Cost-Benefit Analysis and Centralized Review of Independent Agency Rulemaking," Mercatus Working Paper, Mercatus Center at George Mason University (May 31, 2017), available at https://www.mercatus.org/system/files/mercatus-gray-executive-power-independent-agencies-v1.pdf.

[164] Ajit Pai, "Remarks of Federal Communications Commission Chairman Ajit Pai at the Hudson Institute: The Importance of Economic Analysis at the FCC," (speech, Washington, DC, April 5, 2017), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-344248A1.pdf.

III. The FCC Should Follow the Guidance in OMB Circular A-4

The *Restoring Internet Freedom* NPRM proposes to follow the guidelines in Section E of OMB Circular A-4,[165] which specify the methodology that executive branch agencies are to follow. Paragraph 106 of the NPRM states:

> In conducting the CBA, we propose to follow standard practices employed by the federal government. Specifically, we propose to follow the guidelines in Section E ("Identifying and Measuring Benefits and Costs") of the Office of Management and Budget's Circular A-4.230 This publication provides guidelines which an agency can follow for identifying and quantifying costs and benefits associated with regulatory decisions while allowing for appropriate latitude in how the analysis is conducted for a particular regulatory situation. We seek comment on following Circular A-A generally. We also seek comment on any specific portions of Circular A-4 where the Commission should diverge from the guidance provided. Commenters should explain why particular guidance in Circular A-4 should not be followed in this circumstance and should propose alternatives.

The FCC's proposal to follow Section E of OMB Circular A-4 is appropriate. The guidance in Circular A-4 has been used by three administrations now dating back to 2003. Before it was implemented, the guidance in Circular A-4 was reviewed by an impressive bipartisan panel of experts, including Cass Sunstein (Obama administration) and W. Kip Viscusi (Carter and Reagan administrations). The FCC should only deviate from these standards if it has very compelling reasons for doing so. Most likely the standards from OMB Circular A-4 will be appropriate for all issues the FCC must consider in any cost-benefit analysis.

Going forward, the FCC should be guided by the recent precedent at another independent regulatory agency, the SEC. Several federal court decisions remanded regulations to the SEC between 2005 and 2011 as arbitrary and capricious based on inadequate economic analysis prior to the adoption. In response, the SEC adopted a 2012 Memorandum stating how the agency will incorporate cost-benefit analysis in its regulatory reviews.[166] This current SEC guidance is largely based on OMB Circular A-4. Jerry Ellig, Senior Fellow for the Mercatus Center at George Mason University, assessed the improvements in SEC regulatory analysis after the 2012 guidance was adopted.[167] While Ellig found some areas where the SEC still fell short, he concluded that the improvements in the SEC's economic analysis were encouraging:

> In a relatively short period of time, the SEC issued new guidance for economic analysis, reorganized internally to give economists a greater voice in rulemaking, and produced a measurable improvement in the quality of economic analysis accompanying its

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[165] Office of Management and Budget, "OMB Circular No. A-4: Regulatory Analysis" (September 3, 2003), available at https://obamawhitehouse.archives.gov/omb/memoranda_m03-21/.

[166] SEC Division of Risk, Strategy, and Financial Innovation and SEC Office of the General Counsel, "Current Guidance on Economic Analysis in SEC Rulemakings (March 16, 2012), available at https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf.

[167] Jerry Ellig was recently named Chief Economist at the FCC. Federal Communications Commission, "Chairman Pai Appoints Ellig Chief Economist (news release, July 5, 2017, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0705/DOC-345657A1.pdf.

> regulations. Conceptual economic reasoning, use of relevant economic literature, and quantification all improved.[168]

The FTC has also instituted cost-benefit analysis as part of its internal processes. Former FTC Commissioner Julie Brill, a Democrat, described the FTC's use of cost-benefit analysis last year as follows:

> As an independent agency, the FTC is not bound by the requirements of cost-benefit analysis that apply to agencies that are part of the president's administration. But the FTC conducts its rulemakings with the same level of attention to costs and benefits that is required of other agencies. We build extensive records from public workshops and formal written comments from the public to inform these assessments. And we review all regulations at least every ten years to determine whether any changes are warranted or whether they are still needed at all.[169]

Following the examples of the SEC and FTC, the FCC should adopt its own internal requirements for using cost-benefit analysis, which could be modeled on the SEC's 2012 Memorandum.

IV. Defining the Cost-Benefit Analysis Baseline

A critical early step in any cost-benefit analysis is defining the baseline, or multiple baselines, against which the proposed regulation should be compared. Such a comparison is necessary so that the impact of the regulation can be measured as the change from the baseline to the proposed regulated scenario. Paragraph 107 of the NPRM states:

> Any CBA should be conducted by comparing the costs and benefits relative to the "baseline" scenario. As OMB Circular A-4 explains, "[t]his baseline should be the best assessment of the way the world would look absent the proposed action." Care should be taken to recognize that in certain cases repealing or eliminating a rule does not result in a total lack of regulation but instead means that other regulations continue to operate or other regulatory bodies will have authority. For example, as we evaluate the costs and benefits of maintaining the current classification of broadband Internet access service as a telecommunications service, the CBA should recognize that changing the classification of broadband Internet access service to an information service would result in the FTC having jurisdiction over certain aspects of such services. Therefore, the benefits and costs of the FCC maintaining Title II jurisdiction over broadband Internet access service should be calculated with FTC enforcement as the appropriate baseline. In this example, the benefits of maintaining the Commission's Title II classification are those benefits that

[168] Jerry Ellig. "Improvements in SEC Economic Analysis since Business Roundtable: A Structured Assessment." Mercatus Working Paper, Mercatus Center at George Mason University (December 2016), available at https://www.mercatus.org/system/files/mercatus-ellig-sec-business-roundtable-v1.pdf.

[169] Julie Brill, "Safe – and, or, versus – Sorry: How the Federal Trade Commission Approaches Consumer Protection: Keynote before the TACD 16th Annual Forum – The Precautionary Principle in TTIP: Trade Barrier or Essential for Consumer Protection? (speech, January 26, 2016) (footnote omitted), available at https://www.ftc.gov/system/files/documents/public_statements/913213/160126tacdkeynote.pdf.

> exist over and above the "baseline" scenario of FTC jurisdiction (and FCC Title I protections). Likewise, the costs of maintaining Title II should be estimated as those costs of ex ante FCC regulation relative to FTC ex post regulation. We seek comment on the appropriate baseline scenarios that should be used and on our proposed course of action above.

The FCC appears to be proposing to conduct a cost-benefit analysis of the 2015 *Open Internet Order*, as implemented, rather than an analysis of the *Restoring Internet Freedom* NPRM. That is consistent with the FCC's language in paragraph 107 that "the costs of maintaining Title II should be estimated as those costs of ex ante FCC regulation relative to FTC ex post regulation," which indicates that the FCC's baseline or baselines will be based on the previous "lighter touch" regulation that existed before the 2015 *Open Internet Order*.

In this case, the Commission's approach probably makes sense because, for the most part, the agency is proposing to return to the regulatory regime in place before the adoption of the 2015 order that imposed public utility-type regulation. So, this approach has the advantage of being able to draw upon the experience and data from the lighter touch regulation era before 2015. This baseline can also be used for separate cost-benefit analyses of keeping different components of the *Open Internet Order*, including maintaining the general conduct rule, the no-blocking rule, the no-throttling rule, the ban on paid prioritization, and the transparency rule.

To the extent the FCC is considering undoing the 2015 *Open Internet Order* and returning to the pre-2015 regulatory structure, then a cost-benefit analysis of the *Open Internet Order* is simply the mirror image of a cost-benefit analysis of the proposed regulation. If, however, the FCC is considering keeping parts of the *Open Internet Order* or not going back to the pre-2015 regulation in some other way, then the analysis will become more complicated, and using the pre-2015 regulatory environment as the baseline becomes less appropriate.

The remainder of this analysis presumes the FCC is proposing to return to the same regulation as before 2015 as the baseline. This would include returning to the antitrust, consumer protection, and any other regulatory policies that were in place before 2015.

V. Evaluating Uncertainty

The FCC models its request for guidance on how to evaluate uncertainty by tracking the language in OMB Circular A-4, which is appropriate for framing the uncertainty issue. Paragraph 108 of the NPRM states:

> In weighing the costs and benefits of any policy, there always exists an element of uncertainty. As commenters suggest costs and benefits the Commission should consider, we ask that to the extent possible information could also be provided about the level of certainty surrounding a scenario or particular value. Also, various costs and benefits are likely to occur at different points in time. When suggesting costs and benefits, we seek comment on the timing of those costs and benefits. We also seek comment on how uncertainty around and timing of costs and benefits should interact in the analysis. (footnote omitted.)

One of the challenges in cost-benefit analysis is accounting for uncertainty. Other federal agencies, however, including the Environmental Protection Agency and the SEC, have been able to address uncertainty successfully in their cost-benefit analyses.

A new article by Richard L. Revesz, Director of the American Law Institute and Dean Emeritus at the New York University School of Law, strongly advocates for independent agencies relying on cost-benefit analysis, and he concludes that the available methods already used by other federal agencies are up to the task. He writes:

> This Article has shown the deep shortcomings of independent agencies in general, and of the financial regulatory agencies in particular, with respect to the preparation of cost-benefit analyses in rulemaking. As a result of these shortcomings, many significant rules have fared poorly in the courts, giving rise to a defeatist debate [that] has ensued on whether such cost-benefit analysis is even possible.
>
> This debate detracts attention from the important institutional issue at stake: given that the requirement that the financial regulatory agencies justify some of their rules in cost-benefit terms is here to stay, and likely to become even more prevalent, what institutional structures are best able to perform this task? And, fortunately, there are good models within the Executive Branch to guide this inquiry, particularly with respect to environmental regulation. The path will undoubtedly be a difficult one, but the direction is clear. The institutions and practices that have served us well in one area are available to the other. We just need to embrace the lessons that we have learned over the past several decades.[170]

It should be noted that the *Open Internet Order* is contributing to much of the uncertainty in the market today. Free State Foundation Senior Fellow Seth Cooper documents the ways the catch-all" general conduct standard is vague and creates difficulties for firms seeking to comply.[171] One example is how the FCC used the general conduct standard to inject uncertainty into the market by investigating zero-rating plans by wireless carriers that were intended to subsidize Internet access for low-income Americans. FCC Commissioner Michael O'Rielly criticized the vague Internet general conduct standard as having "changed investment decisions and rollout of products based on the rules."[172]

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[170] Richard L. Revesz, "*Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*," 34 Yale J. Reg. (forthcoming 2017).

[171] Seth L. Cooper, "FCC's Vague 'General Conduct' Standard Deserves Closer Legal Scrutiny," Free State Foundation (July 6, 2016) available at http://www.freestatefoundation.org/images/FCC_s_Vague_General_Conduct_Standard_Deserves_Closer._Legal_Scrutiny_070616.pdf.

[172] See John Eggleton, "O'Rielly Slams FCC's General Conduct Standard," Broadcasting Cable (May 06, 2016), available at http://www.broadcastingcable.com/news/washington/orielly-slams-fccs-general-conduct-standard/156256.

VI. Costs and Broadband Capital Investment

Economic theory supports the FCC's presumption that maintaining the *Open Internet Order* will depress investment relative to the baseline discussed in the previous section.[173] The FCC is correct to focus much of its cost analysis on how broadband capital investment is being adversely affected. Paragraph 109 of the NPRM states:

> Costs. There is evidence that the actions taken by the Commission in the Title II Order have reduced investments by ISPs. We presume that maintaining those actions would depress investment relative to the baseline. Many of the costs of lower or misallocated investment in networks and in other sectors of the digital economy will be due to consumers and businesses having less broadband Internet access service coverage and lower quality of service. Since the networks built with capital investments are only a means to an end, we believe that the private costs borne by consumers and businesses of maintaining the status quo result from decreased value derived from using the networks. We seek comment on this analysis. What approaches should we use to capture these costs? We seek comments on particular methods and data sources we might use to estimate the private costs of forgoing the building, maintaining, or upgrading of these networks. (footnote omitted)

Evidence is emerging that the 2015 *Open Internet Order* is having that depressing effect on broadband capital investment. In a recent address, FCC Chairman Ajit Pai cited Free State Foundation research by Research Associate Michael Horney estimating that the *Open Internet Order* "has already cost our country $5.1 billion in broadband capital investment."[174] Horney used as his baseline a trend line generated from actual capital investment from 2003 to 2014. When new data for actual investment in 2015 became available, Horney revised his estimate using the same methodology to project a decrease of $5.6 billion in broadband investment over 2015 and 2016.[175] Horney's estimate is similar to the estimate by Hal Singer, Senior Fellow at the Progressive Policy Institute, who finds a drop in broadband investment of $3.6 billion in 2016 alone, or 5.6%, relative to a baseline of 2014 investment.[176]

George Ford of the Phoenix Center for Advanced Legal and Economic Public Policy Studies traces the lost investment back to December of 2010, when then-Chairman Julius Genachowski

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[173] See, e.g., Theodore Bolema, "Allow Paid Prioritization on the Internet for More, Not Less, Capital Investment" Free State Foundation (May 1, 2017), available at http://www.freestatefoundation.org/images/Allow_Paid_Prioritization_on_the_Internet_for_More,_Not_Less,_Capital_Investment_050117.pdf.

[174] Ajit Pai, "Remarks of Federal Communications Commission Chairman Ajit Pai at the Newseum: The Future of Internet Freedom," (speech, Washington, DC, April 26, 2017), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0426/DOC-344590A1.pdf.

[175] Michael J. Horney, "Broadband Investment Slowed by $5.6 Billion Since Open Internet Order" Free State Foundation Blog (May 5, 2017), available at http://freestatefoundation.blogspot.com/2017/05/broadband-investment-slowed-by-56.html.

[176] Hal Singer, "2016 Broadband Capex Survey: Tracking Investment in the Title II Era," March 1, 2017, available at https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era/.

proposed Internet regulations that, in effect, imposed Title II-like common carrier mandates.[177] Thus, Ford argues that broadband investment had already started dropping by 2011 in anticipation of the *Open Internet Order*. Ford finds that "over the interval 2011 to 2015, another $150-$200 billion in additional investment would have been made 'but for' Title II reclassification."[178]

The most prominent claim that Title II regulation has not reduced broadband investment has been made by Free Press, which argues that following the *Open Internet Order*, broadband capital investment increased by 5.3% between 2013-2014 and 2015-2016.[179] Hal Singer points out, however, that the increase Free Press asserts is misleading because it includes some large non-broadband investments, including Sprint's leased handsets and certain AT&T investments by DIRECTV and a Mexican affiliate.[180] George Ford reviewed the Free Press analysis, and found that Free Press' data actually shows a decline in capital investment. Ford concludes that "Free Press' own data, therefore, provides support for the $3.7 to $5.1 billion investment decline cited by Chairman Pai when announcing his intent to review. . . the 2015 *Open Internet Order*."[181]

These reports, as well as the data sources they rely upon, should provide a strong basis for estimating the investment impact of the *Open Internet Order* relative to the baseline. The adverse effects of this decline in annual capital investment on total economic activity are discussed below.

VII. Foregone Networks Lead to Many Lost Societal Benefits

The FCC correctly points out that foregone networks will lead to negative spillover effects in Paragraph 110 of the NPRM:

> In addition to the private costs discussed above, foregone networks may also impose additional societal costs. In particular, fewer network effects created by increased connectivity will occur. As another example, society will not realize some efficiencies and savings from governments delivering services over the networks. Additionally, there

[177] In re Preserving the Open Internet, FCC 10-201, 25 FCC Rcd 17905, Report and Order (December 23, 2010), rev'd and remanded, Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014).

[178] George Ford, "Net Neutrality, Reclassification and Investment: A Counterfactual Analysis Net Neutrality, Reclassification and Investment: A Further Analysis, Phoenix Center for Advanced Legal and Economic Public Policy Studies (April 25, 2017), available at http://www.phoenix-center.org/perspectives/Perspective17-02Final.pdf.

[179] S. Derek Turner, "It's Working: How the Internet Access and Online Video Markets are Thriving in the Title II Era," Free Press (May 2017), available at: https://www.freepress.net/sites/default/files/resources/internet-access-and-online-videomarkets-are-thriving-in-title-II-era.pdf.

[180] Hal Singer, "The Days of Common Carriage for Broadband Are Numbered. Here's Why," *Forbes* (May 17, 2017), available at https://www.forbes.com/sites/washingtonbytes/2017/05/17/the-days-of-common-carriage-for-broadband-are-numbered-heres-why/#77d8ba7978fb.

[181] George Ford, "Reclassification and Investment: An Analysis of Free Press' 'It's Working' Report," Phoenix Center for Advanced Legal and Economic Public Policy Studies (May 22, 2017), available at http://www.phoenix-center.org/perspectives/Perspective17-04Final.pdf.

> are likely long run costs due to forgoing better connectivity that would allow new products and services to be created. We seek comment on this analysis. How should our CBA incorporate these types of cost into the analysis? What other ancillary costs might exist? What data is appropriate to use?

Also, foregone networks will lead to many lost societal benefits, in terms of lost employment, lost opportunities for governments to offer improved services, and increased risk for local governments.[182] If the FCC follows the multiplier approach suggested in the next section, then the economic impact of reduced employment will also be captured through the multiplier effect.

Federal, state, and local governmental units in the future may want Amber alerts, severe weather alerts, and Homeland Security warnings given priority over other Internet traffic. As the government services evolve, governments may want to have some form of prioritization available as an option for these and other highly time-sensitive functions. The FCC should include some costs in its analysis reflecting how enhancement in these types of government functions may be delayed by the restrictions in the *Open Internet Order*.

Some state and local governments are also broadband providers, so they are potentially adversely affected by the *Open Internet Order* requirements. To the extent that the *Open Internet Order* is leading to less private broadband capital investment, it is somewhat likely that more state and local governments will pursue municipal broadband projects.[183] This is especially important for the FCC to consider given the poor financial performance of municipal broadband providers.

A new study by Christopher Yoo and Timothy Pfenninger of the University of Pennsylvania examines the financial data for all municipal broadband projects that report their financial data separately from other government operations. They find that a majority of the projects are generating negative cash flows, and most of the rest are not on track to break even.[184] These failures have very sizeable costs to local governments, as Yoo and Pfenninger explain:

> A closer examination of specific projects reveals that the risks and consequences are quite real. Many cities managing these projects have faced defaults, reductions in bond ratings, and ongoing liability, not to mention the toll that troubled municipal broadband ventures can take on city leaders in terms of personal turmoil and distraction from other

[182] George Ford, "Regulatory Revival" and Employment in Telecommunications," Phoenix Center for Advanced Legal and Economic Public Policy Studies (June 12, 2017), available at http://www.phoenix-center.org/perspectives/Perspective17-05Final.pdf.

[183] For example, Traverse City, Michigan is currently considering proposals for a municipal broadband system, based on a claimed lack of private broadband availability. Hannah Trostle, "A String of Municipal Network Ideas: Traverse City Mulls Options," Community Networks (April 17, 2017), available at https://muninetworks.org/content/string-municipal-network-ideas-traverse-city-mulls-options.

[184] Christopher Yoo and Timothy Pfenninger, "Municipal Fiber in the United States: An Empirical Assessment of Financial Performance," University of Pennsylvania Law School's Center for Technology, Innovation and Competition (May 2017), available at: https://www.law.upenn.edu/live/files/6611-report-municipal-fiber-in-the-united-states-an.

> matters important to citizens. City leaders should carefully assess all of these costs and risks before permitting a municipal fiber program to go forward.[185]

Based on past poor financial performance of these municipal systems, the FCC should expect a significant share of any new municipal broadband systems to also perform poorly and to put a strain on state and local government finances.

These types of costs can be difficult to quantify but they are nevertheless foreseeable consequences of the *Open Internet Order*. Therefore, they are important to include in the cost-benefit analysis.

VIII. Investment and a Multiplier Approach

The *Restoring Internet Freedom* NPRM proposes to use a multiplier approach to connect the lost investment effects from the *Open Internet Order* to the total economic cost of the 2015 regulation. Paragraph 111 of the NPRM states:

> It is also likely that the foregone investment per se results in economic costs (e.g. fewer network construction jobs), and we seek comment on how the Commission should incorporate any such these costs into the analysis. For example, should the Commission use a multiplier to account for economic activity missed due to tempered investment? If so, what are the appropriate multipliers to use? Commenters should provide sources to justify recommendations for multiplier values.

The investment multiplier approach is used to quantify the impact public or private investment spending has on the general economy. It provides an estimate of the additional effects of a policy that are not immediately measurable. A larger multiplier means that the investment was more efficient at creating wealth in the economy. An investment multiplier tries to measure the total economic impact of a project, which includes the incomes of construction workers, the profits for material suppliers, and other related costs of the project. These people then spend some of their incomes from the project elsewhere in the economy, which adds to incomes and profits in other sectors of the economy.

The lost investment impact of the *Open Internet Order* discussed above is substantial. However, the FCC correctly suggests in paragraph 111 that the total economic impact is not necessarily the same. It could be lower if much of the investment spending is redirected elsewhere and would still contribute to the economy even under the baseline scenario. Or the investment multiplier could be higher if the additional investment spending leads to a large increase in other spending.

Former Director of the Congressional Budget Office Douglas Holtz-Eakin and Michael Mandel, Chief Economic Strategist for the Progressive Policy Institute, estimate a multiplier for evaluating proposed federal infrastructure projects. They compare their estimate with those used by CBO and the International Monetary Fund:

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[185] Id.

> The midpoint of the CBO's range, 1.3, is very close to the IMF's medium-term estimate of 1.4. However, we note that the actual multiplier could be quite a bit higher or lower depending on the macroeconomic environment. Moreover, predicting the state of the economy even a couple of years ahead is not an easy task. Therefore, we suggest using a conservative medium-term multiplier of 0.8 for the purposes of dynamic scoring. In other words, $1 of additional infrastructure spending adds $0.8 to GDP if there is sufficient slack in the economy.[186]

Holtz-Eakin and Mandel conclude that their infrastructure example "suggests that $100 billion in new infrastructure spending could generate an extra $62.5 to $165.5 billion in national output over the next twenty years, taking the initial investment into account."[187]

Other studies find that the private investment multiplier is larger than a public infrastructure multiplier. For example, Portuguese economists Diogo Barbosa, Vitor M. Carvalho, and Paulo J. Pereira surveyed papers that estimated investment multipliers in developed countries, including papers by Antònio Afonso and Miguel St. Aubyn:

> They also found that the impact of a unitary increase in investment on GDP is, on average, 0.73 and 1.47, respectively for public investment and private investment. This means that the private investment multiplier is twice as much as the public investment multiplier for this sample.[188]

There is also good reason to believe that broadband infrastructure investment may contribute more to the economy than investments in other sectors of the economy. Thus, a multiplier above 1.0, and perhaps in the range of 1.25 to 1.75, is likely to be a reasonable and even conservative estimate based on current research.

Applying this multiplier to the Free State Foundation estimate by Michael Horney of a $5.6 billion reduction in broadband investment over 2015 and 2016[189] produces an estimate of $7.0 and $9.8 billion in lost economic activity attributable to the *Open Internet Order*, with a

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[186] Douglas Holtz-Eakin and Michael Mandel, "Dynamic Scoring and Infrastructure Spending," McGraw Hill Financial Global Institute (July 6, 2015), at 10, available at http://media.mhfi.com/documents/201511-MHFIGI-Dynamic-Scoring.pdf.

[187] Douglas Holtz-Eakin and Michael Mandel, "Dynamic Scoring and Infrastructure Spending," McGraw Hill Financial Global Institute (July 6, 2015), at 16, available at http://media.mhfi.com/documents/201511-MHFIGI-Dynamic-Scoring.pdf.

[188] Diogo Barbosa, Vitor M. Carvalho and Paulo J. Pereira, "The Interaction between Firms and Government in the context of Investment Decisions: A Real Options Approach," FEP Working Papers 57, (October, 2013), available at https://www.fep.up.pt/investigacao/workingpapers/wp507.pdf; citing Antònio Afonso and Miguel St. Aubyn, "Macroeconomic rates of return of public and private investment: Crowding-in and crowding-out effects," The Manchester School 77, 21–39 (2009); and Antònio Afonso & Miguel St. Aubyn, "Public and private investment rates of return: evidence for industrialized countries, Applied Economics Letters (2010), 17:9, 839-843.

[189] Michael J. Horney, "Broadband Investment Slowed by $5.6 Billion Since Open Internet Order" Free State Foundation Blog (May 5, 2017), available at http://freestatefoundation.blogspot.com/2017/05/broadband-investment-slowed-by-56.html.

midrange estimated economic impact of negative $8.4 billion. Horney's estimate showed that the gap between the baseline investment and actual investment was growing. If this trend continues, as is likely, the economic impact of the *Open Internet Order* will only become greater, in a negative direction, over time.

IX. Costs of New Products and Services Held Back by Regulation

The FCC asks for comment on new product and services that do not emerge and become viable due to the *Open Internet Order* in paragraph 112:

> Lastly, there may be other costs that are not directly the result of decreased investment in networks. Maintaining current policies may prevent new business models or new product and services from being viable and ultimately delivering value to society. We seek comment on such costs and how we may incorporate them into our analysis.

The most likely impediment to the development of new business models or new products and services that would otherwise deliver value to society is the prohibition against paid prioritization. Slotting allowances used by bookstores and grocery stores, priority seating at sporting events, and tolls for using fast lanes on highways are paid prioritization arrangements that have proven success in attracting more investment that leads to better economic outcomes for customers.[190] For this reason, vertical restraints in other markets consistently have been examined on a case-by-case basis, an approach endorsed by the U.S. Supreme Court in a 2007 decision when it rejected the *per se* prohibition of minimum resale prices.[191]

Some specialized services for dedicated users require a high level of end-to-end reliability, which may not be available now or in the future under the current ban on paid prioritization. For example, the benefits from video phone calls and video streams from Netflix are reduced when they are delayed by slow buffering. Other Internet uses, like emailing and most file downloads, retain most or all of their value if their transmission is slightly delayed. As capital investment in broadband capacity continues to decline and demand for Internet services increases, the ban on paid prioritization will affect both services that are sensitive to delays and services that are not. Those that are harmed may be better off paying extra, in the same way that some people shipping packages are willing to pay extra for priority mail services, while others will not see enough benefit from avoiding delays to justify paying more.

New entrants in existing markets may be willing to pay more to ensure that delays are avoided in order to enhance their chances of gaining a foothold and establishing a customer base. And it may be that allowing some form of prioritization provides incentives for differentiating services, especially those offered by a new entrant trying to establish a market presence. This is another way that eliminating an absolute ban on paid prioritization is likely to be pro-competitive.

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[190] See Theodore Bolema, "Allow Paid Prioritization on the Internet for More, Not Less, Capital Investment" Free State Foundation (May 1, 2017), available at http://www.freestatefoundation.org/images/Allow_Paid_Prioritization_on_the_Internet_for_More,_Not_Less,_Capital_Investment_050117.pdf.

[191] Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877 (2007).

Autonomous vehicles, interactive e-learning, and telemedicine are examples of applications in their early stages of development that may require access to fast and stable Internet connections. Investors may be unwilling to take the risk of investing in these applications if they cannot be assured of reliable prioritized broadband connections.

The economic benefits from these new services are very large. For example, Clifford Winston and Quentin Karpilow estimate that "autonomous vehicles could generate 3 million additional jobs, raise the nation's annual growth rate by 1.8 percentage points from a 2010 baseline GDP of about $14.6 trillion, and raise annual labor earnings by more than $100 billion."[192] Winston and Karpilow note that their estimates are for passenger vehicle traffic alone, and that large economic gains will also be achieved for freight traffic using autonomous trucks.[193] Thus, any delays in the development of the infrastructure needed to support autonomous vehicles due to insufficient broadband investment and the inability to offer prioritized connections will impose very large costs relative to the baseline, and must be considered in any cost-benefit analysis.

The FCC should also consider how the burden of the *Open Internet Order* likely falls more heavily on small businesses, a source of important innovation in the economy. As Karen Kerrigan, President and CEO of the Small Business & Entrepreneurship Council, explains:

> Of course, most directly, small businesses are being affected by higher costs and more regulations. And, again, the damage to investment hinders innovation and broadband access. By creating major uncertainty in the marketplace the FCC has diminished the incentives to invest, which are the life-blood of innovation and dynamic entrepreneurship.
>
> It's time to end this failed effort and return to a lighter regulatory framework for our Internet ecosystem. I strongly encourage Chairman Pai to take swift action to undo this onerous regulatory leftover from the Obama Administration. A modern and enlightened regulatory approach will help entrepreneurs and small businesses take full advantage of the opportunities afforded by the broadband Internet to help grow the economy, innovate and create jobs.[194]

The rigid prohibition against charging for paid prioritization is preventing or delaying new and innovative services from developing in ways that are difficult to anticipate. The impact of these lost opportunities is difficult to measure because we cannot easily anticipate what will never happen. The Winston and Karpilow analysis of driverless vehicle technology is a rare study that attempts to anticipate these economic benefits. Nonetheless, the FCC should include an estimate of the loss of economic activities for delays in the development of these new applications.

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[192] Clifford Winston and Quentin Karpilow, "A New Route to Increasing Economic Growth Reducing Highway Congestion with Autonomous Vehicles," Mercatus Working Paper, Mercatus Center at George Mason University (January 2017) at 43, available at https://www.mercatus.org/publications/economic-growth-congestion-autonomous-vehicles.

[193] Id.

[194] Karen Kerrigan, "The Obama Era Rules the FCC Must Undo," Real Clear Markets (April 26, 2017), available at http://www.realclearmarkets.com/articles/2017/04/26/the_obama_era_rules_the_fcc_must_undo_102652.html.

X. Benefits from the *Open Internet Order* Depend on Finding a Market Failure

The FCC requests comments on benefits created by the current policies, relative to an appropriate baseline, and how those benefits are due to a market failure that is not addressed by the light touch regulation that existed before 2015. Paragraph 113 and 114 of the NPRM state:

> Benefits. There are various theoretical possibilities for economic benefits created by the current policies. We therefore seek comment on these benefits. Commenters should identify these benefits relative to an appropriate baseline, not relative to a situation where there is no regulation or statute to govern behavior. For example, if the ban on paid prioritization is maintained but broadband Internet access service is classified as an information service, then commenters should identify the benefits a blanket ban on paid prioritization carries over the FTC's authority to police anticompetitive conduct.
>
> We particularly seek comments that attempt to quantify the benefits rather than merely suggest the existence of benefits without any indication of its magnitude. We also ask commenters to particularly highlight benefits where actual misconduct has been observed. To the extent the baseline scenario allows any market failures to go unregulated, commenters should clearly identify the market failure and the estimated economic benefit associated with addressing through maintenance of current policies.

Jerry Brito and Jerry Ellig of the Mercatus Center wrote in 2007 about how the FCC should evaluate net neutrality proposals. In this article, written a decade ago, Brito and Ellig questioned whether the FCC could find any meaningful market failure and warned about consequences of failing to do so before proceeding with any form of net neutrality regulation:

> Regulatory economists generally accept that government action can enhance consumer welfare when a clear "market failure" exists that cannot be addressed adequately by other means. Thus, regulatory analysis must explicitly identify market failures or other systemic problems underlying the need for action. If there is no market failure or other systemic problem, then government action will likely do more harm than good.[195]

The FCC justified the 2015 *Open Internet Order*, including its ban on paid prioritization on the Internet, in large part on what it called the "virtuous cycle" theory:

> The key insight of the virtuous cycle is that broadband providers have both the incentive and the ability to act as gatekeepers standing between edge providers and consumers. As gatekeepers, they can block access altogether; they can target competitors, including competitors to their own video services; and they can extract unfair tolls. Such conduct would, as the Commission concluded in 2010, "reduce the rate of innovation at the edge and, in turn, the likely rate of improvements to network infrastructure." In other words,

[195] *Jerry Brito and Jerry Ellig,"A Tale of Two Commissions: Net Neutrality and Regulatory Analysis,"* 16 CommLaw Conspectus 1, 16 (2007), citing W. Kip Viscusi, John M. Vernon and Joseph Harrington, Jr., *Economics of Regulation and Antitrust* 313-35, 337-58 (3d ed., 2000) (1992).

> when a broadband provider acts as a gatekeeper, it actually chokes consumer demand for the very broadband product it can supply.[196]

Thus, the 2015 FCC majority argued that its restrictions on broadband providers would encourage investment by ISPs by taking away their incentive to restrict output and drive up their tolls. In doing so, the Internet would be divided into "fast lanes" for those who pay the tolls and "slow lanes" for those that don't. The 2015 FCC majority offered very little evidence, however, that any of these conjectured harms were occurring, despite the history of the Internet having been allowed to develop to that point with less restrictive regulatory oversight and no ban on paid prioritization. As then-Commissioner Ajit Pai pointed out in his dissent to the *Open Internet Order*:

> Nevertheless, the Order ominously claims that "[t]hreats to Internet openness remain today," that broadband providers "hold all the tools necessary to deceive consumers, degrade content or disfavor the content that they don't like," and that the FCC continues "to hear concerns about other broadband provider practices involving blocking or degrading third-party applications." The evidence of these continuing threats? There is none; it's all anecdote, hypothesis, and hysteria…. One could read the entire document—and I did—without finding anything more than hypothesized harms. One would think that a broken Internet marketplace would be rife with anticompetitive examples. But the agency doesn't list them. And it's not for a lack of effort.[197]

FSF's Seth Cooper recently described the warning from Tad Lipsky, Acting Director of the FTC's Bureau of Competition, as follows:

> Characterizing himself as a "light touch regulator" and as "a fan of antitrust as the way of ensuring that dynamic free competition gives the consumer what he wants," Mr. Lipsky also criticized the public utility model of regulation embodied in the 1887 Interstate Commerce Act, stating: "[I]t is a fact that the FCC Title II regulation is a direct descendant of that form of regulation." Mr. Lipsky added:
>
> > [T]he temptation to look at the problems of a dynamic and quickly developing industry and to immediately apply this structure of economic regulation as a way of anticipating and making sure that future problems don't arise has largely been a failure.[198]

Cooper observes:

> Of course, the FCC's *Title II Order* succumbed to such temptation. The order imposed public utility regulation on broadband Internet access services with no evidentiary

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[196] Federal Communications Commission, *Open Internet Order*, March 12, 2015 at ¶ 20 (footnotes omitted).

[197] Dissenting Statement of Commissioner Ajit Pai, *Open Internet Order* (footnotes omitted).

[198] Seth L. Cooper, quoting Tad Lipsky, "Why the FTC Should Oversee Broadband Internet Service Providers," Free State Foundation Blog (June 9, 2017), available at http://freestatefoundation.blogspot.com/.

> findings of market failure or consumer harm. Indeed, the *Title II Order* dismissed market power's relevance.[199]

Market power, of course, is highly relevant for finding a market failure based on the virtuous cycle theory. So long as markets are reasonably competitive, or are moving toward becoming competitive, arrangements that try to take advantage of other parties will not survive for long, because the parties at a disadvantage can find alternative arrangements.

The virtuous cycle theory also ignores the benefits that are typically achieved in other markets from allowing vertical arrangements to develop as suppliers, distributors, and customers experiment in the market to find the arrangements that provide the greatest benefits.[200] Unless the FCC can identify actual systematic evidence of harm from market failures that could only be corrected by the FCC, it is difficult to see how the FCC can conclude that the *Open Internet Order* regulations achieve any net benefits relative to the baseline.

Moreover, the *Open Internet Order* is imposing nontrivial compliance costs on parties, such as those related to the Internet general conduct standard discussed above. Thus, even relatively benign provisions in the *Open Internet Order*, like the bans on blocking and throttling that may not draw objections from Internet providers, will at best achieve no net benefits while still imposing compliance costs.

XI. The FCC Must Also Consider Other Regulatory Approaches

OMB Circular A-4 requires that executive branch agencies consider less intrusive regulatory approaches as part of their cost-benefit analysis. Even if the FCC concludes that a market failure exists in its baseline scenario, that does not mean that the only alternative is the full Title II regulation imposed by the *Open Internet Order*. Instead, the FCC must then consider other case-by-case regulatory approaches that are different from the pre-2015 regulatory environment.

Former FCC Chief Economist Tim Brennan, a member of the Free State Foundation's Board of Academic Advisors, in his "economics-free zone" *FSF Perspectives* suggested three alternative approaches that the FCC should consider:

> First, if broadband providers advertise content-neutral practices, they should be held accountable as a matter of consumer protection. It remains to be seen whether we are better served by the FCC taking over this responsibility from the Federal Trade Commission, which lost its authority over broadband following its reclassification by the FCC as a common carrier.
>
> Second, if the value of broadband depends on confidence that others can open links I post (unless they lie behind a paywall, like The Wall Street Journal's), minimum-quality

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[199] Id.

[200] See Theodore Bolema, "Allow Paid Prioritization on the Internet for More, Not Less, Capital Investment" Free State Foundation (May 1, 2017), available at http://www.freestatefoundation.org/images/Allow_Paid_Prioritization_on_the_Internet_for_More,_Not_Less,_Capital_Investment_050117.pdf.

> regulation may be warranted. While the FCC nominally rejected a minimum-quality rule, its "no throttling" rule implies minimum quality – the lower limit of what would presumably be acceptable quality, "unthrottled," to use the FCC's terminology. A minimum-quality rule would also address concerns that a broadband provider would diminish the quality of non-priority service. The theoretical appeal of a minimum quality does not make such a rule operational, enforceable, and worth any costs in additional congestion management.
>
> A third possibility is regulating the price broadband suppliers charge for content delivery. The FCC effectively has done this. Its "no blocking" rule implies a regulated price of zero for content delivery, because broadband service cannot be denied to content suppliers who do not pay. But the novelty – and highly problematic nature – of this approach is not appreciated by some. The federal government has been reluctant to regulate sectors without a clear monopoly provider, because competition between only two firms is likely to lead to a better outcome than regulation. And regulation is even harder to justify when, as in this case, technological progress rapidly changes the definition of the product one is trying to regulate.[201]

These and other reasonable alternative approaches should be carefully considered before concluding that the highly restrictive public utility regulatory approach in the *Open Internet Order* passes a cost-benefit test. The FCC need not consider every possible alternative approach, but it should commit to considering several lighter touch alternatives such as these, assuming it first finds that it has any role in addressing a market failure.

Conclusion

The FCC's recent actions to better incorporate economic analysis in its regulatory review process are a welcome development. Other federal agencies have been using cost-benefit analysis for decades to better evaluate their regulatory proposals and to help them understand the likely results of different regulatory options they are considering. The FCC should follow their example, drawing upon the expertise that has been developed in their regulatory reviews, as well as from OIRA as it has reviewed the economic analyses by executive agencies.

The *Open Internet Order* has important economic implications that were not considered in 2015. The FCC's current proposal to conduct a proper cost-benefit analysis, following the guidance of OMB Circular A-4, can address that deficiency.

The potential costs of the regulatory environment imposed by the *Open Internet Order* are very large. These costs include the uncertainty added to the market, lost capital investment, and threats to the emergence of new products and services that may require priority access in the future. These costs can only be justified if the FCC can identify a market failure from the pre-2015 regulatory approach that can only be addressed by FCC regulation.

[201] Tim Brennan, "Is the Open Internet Order an "Economics-Free Zone?" Free State Foundation, June 28, 2016, available at http://www.freestatefoundation.org/images/Is_the_Open_Internet_Order_an_Economics_Free_Zone_062816.pdf.

Given the remarkable record of innovation, investment, and choice of new services offered to customers during the era of less restrictive regulation, it is unlikely that any such market failure can be found. Even if the FCC can identify this type of market failure, it must also consider whether alternative approaches, which might include increased antitrust enforcement or new consumer protection regulations by the Department of Justice and the FTC, are sufficient to address the market failure before resorting to public utility regulation of a broadband market.

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